Bakersfield College
2017-2018 Catalog

Accreditation
Bakersfield College is approved by the Chancellor of the California Community Colleges and is regularly evaluated and accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges. ACCJC is an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education. It meets all standards of the California State Department of Education and is listed in the Education Directory, Higher Education, Part 3, published by the United States Office of Education. The University of California, the California State University System, and other colleges and universities give full credit for appropriate courses completed at Bakersfield College.

Student complaints must be in writing and directed to the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges at: www.accjc.org. The ACCJC can be contacted at 10 Commercial Boulevard, Suite 204, Novato, CA 94949; P: (415) 506-0234 | F: (415) 506-0238 or Email: accjc@accjc.org.

Bakersfield College is approved by the following:
• California Board of Registered Nursing
• California State Colleges and Universities
• California State Department of Education
• University of California

Alternative Catalog Versions
The material in this catalog is available in alternate formats. To access copies of alternative formats, contact Disabled Student Programs & Services at 661/395-433

Guided Pathways Re-design
The 2017-18 Bakersfield College catalog represents a complete re-design and overhaul of the academic catalog used for many years. Bakersfield College is moving towards the “Guided Pathways” re-design model that require a significant endeavor to present material in a different manner based upon student pathways, support, and outcomes. This updated catalog will continue to grow and transform over the next year as the pathways model is more fully implemented. The web version of the catalog will be built in an interactive manner to enable students to find information based on “Pathways” programs and courses.

Acknowledgements
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Disclaimer: Bakersfield College has endeavored to produce the most accurate catalog information available, however, approval of courses, programs and transfer occur asynchronously to the annual schedule. Changes in legislation or mandated reporting often affect the services or academic offerings and are updated as required. Readers should be aware that there might be changes made in any print version of the catalog regarding policies and regulations, coursework and programs that may change information in this publication. Bakersfield College reserves the right to modify its programs, tuition and fees, admission and graduation requirements, schedules, and other policies, procedures, and regulations stated in this catalog without notice. Updated versions are posted on the college website and available in the appropriate administrative offices. Catalog addenda are at www.bakersfieldcollege.edu
2017/2018 Academic Calendar

Fall semester 2017 (August 21-December 9)
August 19 Instruction begins
September 1 Last day for refund for semester-length classes*
September 3 Last day to drop from a semester-length class without receiving a W*
September 3 Last day to add a semester-length class with approved add form
September 4 Labor Day holiday
October 20 Last day to withdraw from a semester-length class and receive a "W"*
November 8 Last day to file for graduation
November 8 Early web registration for 2018 Spring semester begins
November 10 Veterans' Day holiday
November 23-24 Thanksgiving holiday
November 29 Open web registration for 2018 Spring semester
December 2-9 Final exams
December 9 End of fall semester

Spring semester 2018 (January 13-May 11)
November 8 Early web registration begins
November 29 Open web registration begins
January 13 First day of classes
January 15 Martin Luther King, Jr. Day holiday
January 26 Last day for a refund for semester-length classes*
January 28 Last day to drop from a semester-length class without receiving a “W”*
January 28 Last day to add a semester-length class with approved add form
February 16 Lincoln’s Birthday Day holiday
February 19 Washington’s Birthday Day holiday
March 23 Last day to withdraw from a semester-length class and receive a “W”*
March 26-31 Spring Break
April 4 Early web registration for 2018 Summer semester begins
April 8 Last day to file for graduation
April 18 Open web registration for 2018 Summer semester
May 5-11 Final exams
May 11 Commencement
May 11 End of spring semester

*In courses other than semester length, the Office of Admissions and Records or the instructor should be consulted regarding drop, withdrawal, and refund deadlines.

Alternate formats
The material in this catalog is available in alternate formats. To access copies of alternative formats, contact Disabled Student Programs & Services at 661/395-4334.
President’s Welcome

It is with great anticipation that we release the 2017-2018 Bakersfield College Catalog. This catalog is one of many valuable tools that you’ll have available during your journey to academic success, achievements, graduation, transfer, and more.

Since our opening year in 1913, the needs of Kern County and the future success of our students has been our highest priority. We are committed to offering the curriculum and culture that prepares our students as critical thinkers, effective communicators, responsible learners, and productive citizens. The Renegade campus is filled with rich history and traditions, but it’s also a thriving environment of innovation, new ideas, energy, growth, and you.

I know college is a big step and it can be confusing and often intimidating. This year, I encourage you to commit to your academic growth and seek help from the various student services available. They are designed with you in mind, so you can successfully and efficiently finish your educational plan. Check our website or visit the Student Welcome Center for more information regarding services, such as academic advising, the math lab, the writing center, workshops, and more.

This is an exciting year at Bakersfield College. There is so much to learn and so much will happen around campus. I invite you to follow Bakersfield College on Facebook and please subscribe to my blog, www.sonyachristianblog.com. As the year progresses, you’ll get all the latest news, see highlights from events, and even shout-outs to fellow students, professors, and cohorts.

And finally, to all students, new and returning, I wish you all the best for a successful and rewarding journey as you continue a rich history of students who have attended Bakersfield College.

Welcome to the Home of the Renegades!

With Renegade pride and collegiality,

Dr. Sonya Christian
President, Bakersfield College

President
Dr. Sonya Christian
661/395-4211
sonya.christian@bakersfieldcollege.edu

Kern Community College District Chancellor
Thomas J. Burke

Board of Trustees President
Kay Meek

Board of Trustees Members
Romeo Agbalog
Dennis Beebe
Kyle W. Carter
John Corkins
Mark Storch
William M. Thomas
Locations and Contact Info

Panorama Campus
1801 Panorama Drive
Bakersfield CA 93305
661/395-4011

Delano Campus
1450 Timmons Avenue
Delano, CA 93215
661/720-2000

Weill Institute
2100 Chester Avenue
Bakersfield, CA 93301
661/336-5100

Administration
President
661/395-4211
Executive Vice President, Instruction
661/395-4305
Vice President, Student Affairs
661/395-4204
Director, Marketing and Public Relations
661/395-4256

Frequently-Used Numbers
Admissions and Records 661/395-4301
Facilities Scheduling 661/395-4518
Financial Aid 661/395-4428
Foundation 661/395-4800
Public Safety 661/395-4554
Transcripts 661/395-4338

Student Services
Admissions and Records 661/395-4301
Assessment Center 661/395-4479
Athletics 661/395-4269
Bookstore 661/395-4506
Career Center 661/395-4083
Counseling Center 661/395-4421
Delano Campus 661/720-2000
Disabled Student Programs and Services 661/395-4334
Extended Learning 661/395-4635
Extended Opportunity Programs and Services 661/395-4351
Learning Center 661/395-4433
Library 661/395-4461
Lost and Found 661/395-4355
Student Employment 661/395-4550
Outreach and School Relations 661/395-4276
President’s Scholars/Re-Entry Scholars 661/395-4614
Scholarships 661/395-4427
Student Government Association 661/395-4355
Student Health and Wellness Center 661/395-4336
Student Life 661/395-4614
Transfer Services 661/395-4221
Tutoring Center 661/395-4430
Veterans Resource Center 661/395-4414
Workability III 661/395-4070

Academic Offices
Academic Development 661/395-4824
Agriculture 661/395-4527
Allied Health 661/395-4281
Apprenticeship 661/395-4408
Art 661/395-4404
Behavioral Science 661/395-4404
Biological Science 661/395-4401
Business Management & Information Technology 661/395-4272
Communication 661/395-4252
Criminal Justice 661/395-4404
Engineering & Industrial Technology 661/395-4405
English 661/395-4252
English for Multilingual Students 661/395-4252
Family & Consumer Education 661/395-4272
Foreign Language/American Sign Language 661/395-4404
Health & Physical Education 661/395-4267
Mathematics 661/395-4231
Music 661/395-4404
Nursing 661/395-4281
Philosophy 661/395-4252
Physical Science 661/395-4401
Social Science 661/395-4404

Social Media
/BakersfieldCollege
@BAKcollege
BAKcollege
@bakersfieldcollege
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About Bakersfield College

History of Bakersfield College
Established in 1913, Bakersfield College is one of the oldest two-year community colleges in the nation. The initial program offered a one-year curriculum, and in 1915 the trustees of the Kern County High School and Junior College District authorized a second year of junior college and normal school courses. The college opened its present day campus high above the Panorama bluffs in 1956. Bakersfield College offers courses at its satellite campuses located in downtown Bakersfield at the Weill Institute, at its Delano Campus, and other locations in Kern County.

The 153-acre Panorama Campus features a state-of-the-art library and technology center and a 19,000-seat stadium that is the crown jewel of community colleges nationwide.

As the majority of the buildings on the Panorama Campus are at least 50 years old, state and bond-funded construction will continue to upgrade facilities to help students achieve their academic goals.

Bakersfield College Mission
Bakersfield College provides opportunities for students from diverse economic, cultural, and educational backgrounds to attain Associate and Baccalaureate degrees and certificates, workplace skills, and preparation for transfer. Our rigorous and supportive learning environment fosters students’ abilities to think critically, communicate effectively, and demonstrate competencies and skills in order to engage productively in their communities and the world.

Bakersfield College Vision
Building upon more than 100 years of excellence, Bakersfield College continues to contribute to the intellectual, cultural, and economic vitality of the communities it serves.

Bakersfield College Core Values
- **Learning:** We foster curiosity, inquiry, critical thinking, and creativity within a safe and rigorous academic environment so that we might be empowered to radically transform our community into one that gives voice and power to all people.
- **Integrity:** We continue to develop and follow an ethical and moral consciousness which places the collective well-being and health above the self; this principled environment allows for open, constructive conversations and teaches us to trust each other’s vision so that we will be useful and effective in providing support, resources, and encouragement.
- **Wellness:** We believe health and wellness to be integral and foundational elements, and we understand that a holistic education improves all aspects of the individual and the society including the mind, body, and spirit; through education, we will positively impact the health of the natural environment and the global community.
- **Diversity:** We insist that diversity be valued and promoted, recognizing that multiple perspectives lead to a better education and knowledge of the world; listening and witnessing different experiences helps us to understand and contextualize power and privilege related to gender, race, class, religion, disability, and sexuality in terms of access and barriers to resources and opportunities.
- **Community:** We commit to the wellbeing of all members of our community; we maintain strong ties with the surrounding community, and we respond to their needs by serving as an open institution which engages all students, faculty, and staff; in our college, we have built and continue to build and environment in which all members participate as a community through democratic engagement.
- **Sustainability:** We recognize our responsibility for continuing and maintaining this institution which has been shaped by over 100 years of resolute and tenacious labor and judicious foresight, so we unceasingly place our energies into imagining how we might sustain and renew our fiscal, human, and environmental resources into the future.
Student Right to Know
In compliance with the Student Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of our college district to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2010, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were tracked over a six year period. Their completion and transfer rates are listed above. These rates do not represent the success rates of the entire student population at the College nor do they account for student outcomes occurring after this six year tracking period.

Based upon the cohort defined below, a Completer is a student who attained a certificate or degree or became ‘transfer prepared’ during a six year period, from Fall 2010 to Spring 2016. Students who have completed 60 transferable units with a GPA of 2.0 or better are considered ‘transfer prepared’. Students who transferred to another post-secondary institution, prior to attaining a degree, certificate, or becoming ‘transfer prepared’ during an eleven semester period, from Spring 2011 to Spring 2016, are transfer students.

The table below compares BC’s Completion and Transfer Rates to the statewide community college average.

<table>
<thead>
<tr>
<th>2010 SRTK Cohort</th>
<th>Completion Rate</th>
<th>Transfer Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield College</td>
<td>17.04%</td>
<td>11.28%</td>
</tr>
<tr>
<td>Statewide</td>
<td>26.26%</td>
<td>13.59%</td>
</tr>
</tbody>
</table>

These rates do not represent the completion and transfer rates of the entire student population at Bakersfield College nor do they account for student outcomes occurring after the three-year tracking period. For further information on SRTK methodology, interpretation and rates at other community colleges, you can visit the CA Community College Chancellor’s Office web site at: http://srtk.cccco.edu/index.asp.

Equal Opportunity Employment Statement
In accordance with the requirements of the Civil Rights Act, Bakersfield College provides services and benefits to students regardless of race, color, national origin, ancestry, gender, age, religion, marital status, medical condition, or disability. The lack of English language skills will not be a barrier to administration and participation in vocational education programs. (Title VI and VII of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 503 and 504 of the Rehabilitation Act of 1973, as amended and the Americans with Disabilities Act of 1990)

All persons have the right to seek admission to and complete an educational program at Bakersfield College. Interference with students’ access and successful completion of their education by any person through unlawful discriminatory conduct will not be tolerated. The college will initiate disciplinary action against persons found to have interfered with a students’ education through any means of illegal or immoral intimidation.

The Kern Community College District will afford reasonable accommodations for applicants and employees to enable qualified individuals to perform essential job functions. Students with disabilities will be accommodated to ensure accessibility and full participation in educational programs. To request reasonable accommodations, applicants and employees should contact the Human Resources Manager at 661/395-4660. Students should contact Disabled Student Programs and Services at 661/395-4334.

Unlawful Discrimination
A complaint of alleged unlawful discrimination may be filed within one year of the alleged discrimination. For complaint forms or additional information, contact one of the following:

Human Resources Manager
1801 Panorama Drive
Bakersfield, CA 93305
661/395-4850

Additional inquiries pertaining to federal, state, and local equal opportunity laws, and the governing board policies of Bakersfield College or Kern Community College District (KCCD Board Policy Section 7-D) may be directed to the following office:

Vice Chancellor, Human Resources
Kern Community College District
2100 Chester Avenue
Bakersfield, CA 93301
661/336-5141

Declaración De Igualdad de Oportunidad
De acuerdo con los requisitos de la acta de derechos civiles, Bakersfield College provee servicios y beneficios a todos estudiantes sin impedimento de raza, color, origen nacional, ancestría, género, edad, religión, estado civil, condición marital, o impedimento. La falta de capacidad de hablar inglés no ser un obstáculo para la admisión vocacionales. (Titulo VI y VII del Acto Civil Derechos Civiles de 1974; Título IX de los Enmiendas de Educación de 1972; las Secciones 503 y 504 del Acto de Rehabilitacion del 1973, como modificado.)

Toda persona tiene el derecho de solicitar admisión y completar un programa educativo en Bakersfield College. No se tolerada interferencia alguna con el acceso y termino exitoso de su educación a ninguna persona o estudiante por medio de conducta discriminatoria ilegal. El colegio iniciara acción disciplinaria contra las personas que sean descubiertas interfiriendo con la educación de los estudiantes por medio de cualquier forma de intimidación ilegal o inmoral.

Discriminación Ilegal
Una queja de discriminación ilegal supuesta se puede ser registradadentro del termino de un año de ocurrida la supuesta discriminación. Para obtener formas de quejas o información adicional usted puede ponerse en contacto con la siguiente persona:

Human Resources Manager
1801 Panorama Drive
Bakersfield, CA 93305
661/395-4850

Para preguntas adicionales referente a las leyes acción afirmativa y igualdad de oportunidad, ya sean al nivel federal, estatal, o local, y referente a la política del consejo de gobierno de Bakersfield College o del Distrito Escolar de la Comunidad de Kern, puede ponerse en contacto con siguiente oficina:
Students with Disabilities
Bakersfield College will make reasonable accommodations and/or academic adjustments to ensure that students with disabilities have an equal opportunity to participate in the college’s courses, programs and activities, including extracurricular activities. Students with disabilities who are requesting academic accommodations or auxiliary aids should contact Disabled Student Programs & Services at 661/395-4334. For DSPS services at the Delano Campus, please contact 661/720-2000. Participation by students with disabilities in Disabled Student Programs & Services is voluntary. Any student choosing not to participate in the program may elect an alternate path for services through the Vice President, Student Affairs.

The Bakersfield College Curriculum Committee approved the following Accessibility Statement: Bakersfield College recognizes the importance and benefits of using technology to enhance student learning, especially as it helps students, faculty and staff communicate more effectively. Every effort will be made to ensure that the design of instructional material and activities for ALL classes taught at Bakersfield College, both face-to-face and at a distance, are accessible to all students, including those with disabilities.

Estudiantes Incapacitados
Bakersfield College proveerá servicio y/o arreglos académicos para asegurar que estudiantes incapacitados tengan oportunidades iguales para participar en las clases de esta escuela, incluyendo actividades extraescolares. Tales estudiantes que pidan arreglos o aparatos auxiliares deben llamar a Disabled Student Programs and Services a 661/395-4334. Participación es voluntaria. Estudiantes que no desean participar en este programa pueden ponerse en contacto con la oficina del Decano de Aprendizaje/Servicios Auxiliares.

Access to and Confidentiality of Student Records: Privacy Act
Student records are protected by the Family Educational Rights and Privacy Act (FERPA), state law, and Kern Community College District Board Policy from access by casual or unauthorized persons. Access to records is provided to the student; appropriate college staff members, persons having written consent of the student, officials of the United States Department of Education; or by court order or subpoena.

The Privacy Act affords Bakersfield College the right to release such directory information as the student’s name, address, e-mail address, photographs, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended. If a student does not want this information released, the student must check the privacy requested box on the admission/update forms.

Present and former Bakersfield College students are given the right to inspect, review, and challenge the contents of all educational records related to them. No information contained in their educational records may be released without their consent, except to those agencies or individuals authorized by the Act. Students wishing to inspect, review, or challenge any of their educational records must make a request in writing to the Director of Enrollment Services, 661/395-4301, Room A-17E. Copies of the Bakersfield College FERPA Policy are available in the Office of Admissions and Records in the Administration building, room 7.

Policy Concerning Sexual Harassment
Bakersfield College is fully committed to all federal, state, and local human rights and equal opportunity laws. Title VII of the Civil Rights Act of 1964, amended 1991, and Title IX of the Educational Amendments of 1972 are strictly enforced. This legislation specifically prohibits sexual discrimination in employment, educational programs, and services respectively.

Students have the right to gain access to and complete an educational program at Bakersfield College. Interference with students' admission to and successful completion of their education by any person through unlawful sexual conduct will not be tolerated. The college will initiate disciplinary action against persons found to have interfered with a student’s education through any means of sexual harassment or intimidation. Bakersfield College has a zero tolerance policy against any sexual misconduct instances.

Board policy sets forth complaint procedures regarding unlawful discrimination and sexual harassment. Students should refer to Section 7-D of the board policy for further information. The board policy can be obtained from the KCCD website.
Matriculation Steps

As a new student...
If you have received a two-year or higher degree from another college but are new to Bakersfield College, you are exempt from the requirements for orientation, assessment, and counseling. All new students who are not exempt must complete the steps below before they can register for classes.

Step 1 - Admission or Update
www.bakersfieldcollege.edu/steps
The first step to higher education success is to apply online to attend Bakersfield College:

New Students:
Click the button below to begin the application. You will be directed to Open CCCApply which is the California statewide web portal that houses the BC application
1. Create an account with CCCApply with your valid email address.
2. Complete the Bakersfield College application. If you do not finish the application completely, you can save your place. Then, return to CCCApply and login again to continue where you left off.
3. After you submit your application and reach the confirmation page, click Continue and then click Activate Your College Account to receive your BC ID and setup your BC Email.

You may need to allow one (1) to three (3) business days to process your application. You’ll receive an email (also check your spam or junk folder) at the address you provide with information on how to access your BC Student Account. If you do not receive an email response within 3 business days or if you are encountering errors, please contact Admissions & Records at bcadmissions@kccd.edu or (661) 395-4301.

International students holding visas must contact the International Counselor in the Advising and Counseling Office www.bakersfieldcollege.edu/international.

Step 2 - Orientation
The Orientation formally introduces you to BC. Register online for the in-person Orientation, or complete the Orientation online. Orientation schedules can be found on the Bakersfield College website at www.bakersfieldcollege.edu/orientation.

Step 3 - Testing and Placement Testing
Students must participate in placement testing and are strongly advised to prepare for your placement tests in Math, Reading, and English. These classes are the foundation for all other classes here at BC.

Take the Assessment Test at the Assessment Center anytime during their business hours with your photo ID and your BC ID or SSN. Practice tests are available online. Visit the “Prepare for Your Assessment Test” page at www.bakersfieldcollege.edu/assessment

Students can request accommodations for disabilities by calling 395-4334.

As a continuing student...
Continuing students are enrolled in current semester classes.

Update

Plan: (www.bakersfieldcollege.edu/counseling)
• Individual advising appointment
• SEP workshops
• Student Development courses
• Follow-up Services

As a returning student...
Returning students have been enrolled in Bakersfield College classes in the past, but not in the current semester.

Update
If you attended Bakersfield College before 1987, complete your admissions form as a new student. If you attended Bakersfield College in 1987 or after, complete the update form online at www.bakersfieldcollege.edu

Orientation
Complete if you have not already attended orientation. If you have never attended an orientation, you are expected to participate in orientation before assessment testing. Orientation schedules can be found:
• at www.bakersfieldcollege.edu/orientation
• in Admissions & Records on the Panorama Campus or the Delano Campus

Placement Testing
Complete if you have not already taken the Bakersfield College assessment test. If not, you must participate in assessment if you plan to:
• take an English, Math, or other class with prerequisites
• earn a degree
• earn a certificate
• transfer

Placement information can be found online at: https://www.bakersfieldcollege.edu/placement.
Admission and Registration

Academic Eligibility
A high school graduate, or anyone who has a Certificate of Proficiency or a General Education Development degree (GED) may be admitted to Bakersfield College.

Any person 18 years of age or older who is not a high school graduate may be admitted if his/her previous training or experience indicates that he/she will profit from the offerings of the college. Such students must have the approval of the Director of Enrollment Services.

Special Status Admission/Concurrent Enrollment/Dual Enrollment
In accordance with California Education Code regulations, K-12 students may enroll as special part-time students on a seat-available basis. Enrollment must be recommended by the high school principal, have parental consent, and receive approval by the college Director of Enrollment Services. Units earned may be used for high school or college credit or both. Students enrolled under this program are exempt from paying enrollment fees. Concurrent students may not register for courses below college level. Non-resident fees may apply.

Residency Determination
A ‘resident’ is a student who has physical presence in the state of California for more than one year immediately preceding the residency determination date, which is the day before the first day of classes, and has demonstrated an intent to make California a permanent home.

The resident of any California community college district may attend a community college in any other district in this state, subject to generally applicable admission criteria, and subject to any restrictions set forth in a notice of restriction issued by a district.

In order to determine a person’s place of residence, reference is made to the following statutory rules:

1. Every person has, in law, a residence. However, not all in the United States.
2. Any person who is married or is 18 years of age or older and under no legal disability to do so, may establish residence.
3. In determining the place of residence the following rules are to be observed:
   a. There can be but one place of residence.
   b. A residence is the place where one remains when not called elsewhere for labor or other special or temporary purpose, and to which he/she returns in seasons of repose.
   c. A residence cannot be lost until another is gained.
   d. The residence can be changed only by the union of act and intent.
   e. A person’s residence shall not be derivative from that of his or her spouse.
   f. The residence of the parent with whom an unmarried child maintains his/her place of abode is the residence of the unmarried minor child. When the minor lives with neither parent, his/her residence is that of the parent with whom he/she maintained his/her last place of abode, provided the minor may establish his/her residence when both parents are deceased and a legal guardian has not been appointed.
   g. The residence of an unmarried minor who has a parent living cannot be changed by his/her own act, by the appointment of a legal guardian, or by relinquishment of a parent’s right of control, unless the student qualifies for the self-supporting exception.
   h. Physical presence within California solely for educational purposes does not allow a student to establish residence, regardless of the length of time present in the state.

In general, a resident has citizenship or permanent resident status in the United States and has established residence in California for at least one year immediately preceding the residency determination date (the day before the first day of classes). If you do not have citizenship or permanent resident status in the United States, or have questions regarding your status, please contact the Office of Admissions and Records in the Administration building, room 7 or at 661/395-4301.

International Students
Students from countries outside of the United States are eligible to attend Bakersfield College if they have the equivalent of U.S. high school diploma, proof of English proficiency as indicated on the International Student Services website, and sufficient financial resources to pay all expenses. www.bakersfieldcollege.edu/international

Admissions Form
An admissions form may be completed on the college web page at www.bakersfieldcollege.edu/apply. It must be filed prior to registration. The application should include the prospective student’s Social Security Number. The Social Security Number will not appear on class roll sheets. Students without a social security number, please call 661-395-4302 for a temporary number before completing the admissions application.

Changing Identification Numbers
All students are assigned an identification number when a completed admissions form is submitted to the Office of Admissions and Records in the Administration building, room 7. Students may use the assigned numbers or their Social Security numbers to access their academic records.

Changing Directory Information
Students may change their name by bringing a State issued photo identification and documentation of the name change in person to the Office of Admissions and Records, in the Administration building, room 7. They may change their address, telephone number, or personal email address on the web at www.bakersfieldcollege.edu. To do that, they must select “InsideBC” > Login > Select “MyBanWeb” > then “Personal Information.”
Passwords
When prospective students complete their admission forms online, they will be asked to create a password. The password must be 8-20 characters long, and contain letters and numbers. Students should select combinations they will be able to remember but that other people would be unable to know. Please do not add any other symbol.

The first time that students login to register they will be asked to select a security hint question from a drop down menu. They fill in the answer to the question that they select with a one or two word answer. Then, when students forget their passwords, they can click the “Forgot Password” button, and if they enter the correct response, they will be given a screen on which to enter a new password. If assistance is needed, please call the Help Desk at 877/382-3508.

Enrollment
All students are required to have an educational/career goal when they fill out their admission form. A student’s educational/career goal is his/her reason for attending college. Bakersfield College is committed to assisting students in successfully reaching their goals. This partnership between the college and the students consists of the following:

The college agrees to provide:

- An admission process
- A testing and placement process
- Academic advising to complete abbreviated and comprehensive educational plans during non-peak times
- Quality instruction
- A wide variety of courses
- Referral to support services as necessary
- Follow up services for academic progress

The college requires that students:

- Complete testing and placement
- Declare a specific educational objective or career path
- Create an abbreviated educational plan for their first semester
- Create a comprehensive educational plan after completing 15 units of course work
- Attend classes regularly
- Complete courses and maintain progress toward an educational/career goal as identified in the individual student education plan
- Seek out support services as needed

Assessment
661/395-4479
Academic skills assessment is designed to determine students’ entry level skills in reading, writing, mathematics, and English as a Second Language. Academic skills assessment may be waived by providing proof of eligibility for admission to a California State University with the appropriate combination of ACT and SAT scores and high school grade point average. www.bakersfieldcollege.edu/placement

Assessment Policy for Students with Disabilities
661/395-4334
Persons with disabilities who might require testing accommodations should contact Disabled Student Programs and Services. In compliance with federal and state laws, Bakersfield College assures each student an equal opportunity to demonstrate competency or knowledge in a subject area at each point in the educational process. Students with disabilities are expected to demonstrate the same competency or knowledge as other students.

Accommodations are made on an individual basis. Such accommodations may include, but are not limited to, an extension of time, the use of a computer, the use of a calculator, and, where appropriate to the disability, an alternative mode of assessment. These tests take place in the Assessment Center.

Procedures
1. Discuss your need for special testing accommodations with each instructor at the beginning of the semester. If requested, show your instructor a copy of your approved Accommodations Checklist. It is not necessary for you to discuss the details of your disability with your instructor unless you want to. It may be best to see your instructor during office hours.
2. One week before each test, pick up a copy of the Test Accommodations Form from the Assessment Center located in the Finlinson Center. Provide the form to the instructor to complete their portion, then return it to the Assessment Center at least 3 days before the test. If you have any questions, call 661/395-4735.
3. If possible, remind your instructor of special testing arrangements before the test.
4. You may be required to take the test on the same day as the rest of your class, unless other arrangements are made.
5. Once you begin the test, you will not be allowed to leave the testing area until the test is completed. You should discuss any personal needs with the Accommodations Coordinator ahead of time.
6. Your completed test will be returned to the instructor according to the arrangements detailed on the Test Accommodations Form.

Students with Disabilities
Bakersfield College will make reasonable accommodations and/or academic adjustments to ensure that students with disabilities have an equal opportunity to participate in the college’s courses, programs and activities, including extracurricular activities. Students with disabilities who are requesting academic accommodations or auxiliary aids should contact Disabled Student Programs & Services at 661/395-4334. For DSPS services at the Delano Campus, contact 661/720-2000. Participation by students with disabilities in Disabled Student Programs & Services is voluntary. Any student choosing not to participate in the program may elect an alternate path for services through the Vice President, Student Affairs.

Estudiantes Incapacitados
Bakersfield College proveerá servicio y/o arreglos académicos para asegurar que estudiantes incapacitados tengan oportunidades iguales para participar en las clases de este colegio, incluyendo actividades extraescolares. Tales estudiantes que pidan arreglos o aparatos auxiliares deben llamar a Disabled Student Programs and Services a 661/395-4334, o al 661/720-2000 para el campus en Delano. Participación es voluntaria. Estudiantes que no desean participar en este programa pueden ponerse en contacto con la oficina del Decano de Aprendizaje/Servicios
Auxiliares.

The Bakersfield College Curriculum Committee approved the following Accessibility Statement: Bakersfield College recognizes the importance and benefits of using technology to enhance student learning, especially as it helps students, faculty and staff communicate more effectively. Every effort will be made to ensure that the design of instructional material and activities for ALL classes taught at Bakersfield College, both face-to-face and at a distance, are accessible to all students, including those with disabilities.

**Disabled Student Programs & Services**

Panorama Campus 661/395-4334  
Delano Campus 661/720-2000

Disabled Student Programs & Services assists the college in providing equal access to educational opportunities for students with disabilities. Disabled Student Programs & Services provides reasonable accommodations to students with documented physical, mental health, and learning disabilities who are enrolled in classes through Bakersfield College. The department provides accommodations and support services which may include, liaison with California State Department of Rehabilitation and other community resources, test taking assistance, special equipment, mobility assistance, note taking, assistive computer technology, special classes, sign language interpreters, written materials in alternate format, and learning disability assessment. These services are intended to prepare and support students to participate on an equal basis with their non-disabled peers. For college material in alternate format, contact Disabled Student Programs & Services.

**WorkAbility III 661/395-4070**

In cooperation with the State Department of Rehabilitation (DOR), Bakersfield College provides job placement for students with disabilities through the WorkAbility III program. A disability may include physical, communication, learning, or emotional disability. Assistance with part-time jobs, full-time jobs, internships, and work experience placement is provided by WorkAbility III. WorkAbility III also offers job search skills training, including resume writing and interviewing skills. These services are provided to Bakersfield College students who are also clients of DOR. In addition, DOR may provide financial aid, which may cover the cost of fees, books, and other services.

If a student with a disability believes he/she may qualify for services from DOR, the student can visit the DOR office at 1405 Commercial Way, Suite 120, Bakersfield, or call 661/395-2525. Eligible students are urged to apply for services from Disabled Student Programs and Services (First Floor of the Student Services building in the Counseling Suite).

For more information please visit the Workability Office in the CSS Building next to Financial Aid.
## Pre-collegiate Pathways

### Math Placement and Flowchart
New students are placed into a mathematics course one of the following ways:
- Completing the prerequisite class in the flowchart below
- Through the Bakersfield College Math placement test
- By earning “Ready for CSU college-level math courses” status on the EAP exam
- By passing the AP Calculus AB exam or AP Statistics exam with a score of 3 or above
- Submitting results from completed math assessment taken at another California community college
- By earning a ‘C’ or better grade in a mathematics course taken at another college or university AND submitting an official college/university transcript to admission and records office

### Math Course Progression
Courses listed in ascending order (level 0 - 06+).
Students must meet eligibility for courses through prerequisite completion or placement level by the college.
Students completing a course that fulfills a certain level will meet eligibility requirements for the next level, unless noted.

<table>
<thead>
<tr>
<th>Placement Level</th>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>ACDV B201C</td>
<td>Math Skills for Academic Success Lab, then retest or placement by faculty</td>
</tr>
<tr>
<td>01</td>
<td>MATH B60</td>
<td>Beginning Algebra</td>
</tr>
<tr>
<td>02</td>
<td>MATH B70</td>
<td>Intermediate Algebra</td>
</tr>
<tr>
<td>03</td>
<td>MATH B65</td>
<td>Intermediate Algebra for Statistics</td>
</tr>
<tr>
<td>04</td>
<td>MATH B1A</td>
<td>Precalculus I</td>
</tr>
<tr>
<td>05</td>
<td>MATH B1B</td>
<td>Precalculus II</td>
</tr>
<tr>
<td>06</td>
<td>MATH B6A</td>
<td>Analytic Geometry &amp; Calculus I</td>
</tr>
<tr>
<td></td>
<td>MATH B6B</td>
<td>Analytic Geometry &amp; Calculus II</td>
</tr>
<tr>
<td></td>
<td>MATH B6C</td>
<td>Calculus III</td>
</tr>
<tr>
<td></td>
<td>MATH B6D</td>
<td>Ordinary Differential Equations</td>
</tr>
<tr>
<td></td>
<td>MATH B6E</td>
<td>Elementary Linear Algebra</td>
</tr>
<tr>
<td></td>
<td>PSYC B3</td>
<td>Elem. Stats for Behavioral and Social Sciences</td>
</tr>
<tr>
<td></td>
<td>MATH B2</td>
<td>Basic Functions &amp; Calc. for Business</td>
</tr>
<tr>
<td></td>
<td>MATH B23</td>
<td>Finite Math</td>
</tr>
<tr>
<td></td>
<td>MATH B22</td>
<td>Elementary Probability &amp; Stats</td>
</tr>
<tr>
<td></td>
<td>MATH B4A</td>
<td>Math for Elementary School Teaching</td>
</tr>
<tr>
<td></td>
<td>MATH B2</td>
<td>Basic Functions &amp; Calc. for Business</td>
</tr>
<tr>
<td></td>
<td>MATH B22</td>
<td>Elementary Probability &amp; Stats</td>
</tr>
</tbody>
</table>

### Transfer Level
Level 04 and higher

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B1A</td>
<td>Precalculus I</td>
</tr>
<tr>
<td>MATH B1B</td>
<td>Precalculus II</td>
</tr>
<tr>
<td>MATH B6A</td>
<td>Analytic Geometry &amp; Calculus I</td>
</tr>
<tr>
<td>MATH B6B</td>
<td>Analytic Geometry &amp; Calculus II</td>
</tr>
<tr>
<td>MATH B6C</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH B6D</td>
<td>Ordinary Differential Equations</td>
</tr>
<tr>
<td>MATH B6E</td>
<td>Elementary Linear Algebra</td>
</tr>
<tr>
<td>PSYC B3</td>
<td>Elem. Stats for Behavioral and Social Sciences</td>
</tr>
</tbody>
</table>

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Students pursuing an Associate’s Degree **without transfer** need to complete one of the following:
- MATH B70
- 2 years of high school algebra
- Have an equivalent placement score

Students pursuing an Associate’s Degree **with transfer** or pursuing transfer without a degree need to complete:
- Minimum of one transfer level math course (level 04 or higher)

*Specific math course is dependent on major
*Some majors and/or transfer institutions require more than one transfer level math course
English Placement and Flowchart
New students are placed into an English course one of the following ways:
- Completing the prerequisite class in the flowchart below
- Through the Bakersfield College English placement exam
- By earning “Ready for CSU college-level English courses” status on the EAP exam
- By passing the AP English Language or Literature Composition Exam with a score of 3 or above
- Submitting results from completed English assessment taken at another California public college or university
- By earning a ‘C’ or better grade in an English course taken at another college or university AND submitting an official college/university transcript to admission and records office

English Course Progression
Courses listed in ascending order (level 02 - 06). Degree applicable and transfer level = 06.
Students must meet eligibility for courses through prerequisite completion or placement level by the college.
Students completing a course that fulfills a certain level will meet eligibility requirements for the next level, unless noted.

<table>
<thead>
<tr>
<th>Placement Level</th>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>ACDV B201B (3-1)/ACDV B281B (0)</td>
<td>Writing for Academic Success Lab Then retest or placement by faculty</td>
</tr>
<tr>
<td>03</td>
<td>ACDV B80 (4)</td>
<td>Foundations of College Composition and Reading (level 03 reading and writing)</td>
</tr>
<tr>
<td>04</td>
<td>ENGL B60 (4)</td>
<td>Basic Writing Skills</td>
</tr>
<tr>
<td>05</td>
<td>ENGL B50 (4)</td>
<td>Introduction to College Composition</td>
</tr>
<tr>
<td>06</td>
<td>ENGL B1A (3)</td>
<td>Expository Composition</td>
</tr>
<tr>
<td></td>
<td>ENGL B53 (4)</td>
<td>Reading, Reasoning, &amp; Writing</td>
</tr>
<tr>
<td></td>
<td>LRNC B510 (7)</td>
<td>Compressed Course Combination of: ENGL B50 &amp; ENGL B1A in one term Must be eligible for ENGL B50—level 05</td>
</tr>
</tbody>
</table>

Completion of ENGL B1A or LRNC B510 (C or better) satisfies the degree/transfer requirement for English Composition/Written Communication.

Reading Placement and Flowchart
Many college level courses have reading prerequisites. The assessment course places students into the reading series which includes traditional and accelerated coursework to help students succeed in all their courses.

Reading Course Progression
Courses listed in ascending order (level 02 - 06). Degree applicable and transfer level = 06.
Students must meet eligibility for courses through prerequisite completion or placement level by the college.
Students completing a course that fulfills a certain level will meet eligibility requirements for the next level, unless noted.

<table>
<thead>
<tr>
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<th>Course</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>02</td>
<td>ACDV B201A (3-1)/ACDV B281A (0)</td>
<td>Reading for Academic Success Lab Then retest or placement by faculty</td>
</tr>
<tr>
<td>03</td>
<td>ACDV B80 (4)</td>
<td>Foundations of College Composition and Reading (level 03 reading and writing)</td>
</tr>
<tr>
<td>04</td>
<td>ACDV B61 (4)</td>
<td>Accelerated Reading</td>
</tr>
<tr>
<td>05</td>
<td>ACDV B50 (3)</td>
<td>Advanced Reading and Critical Thinking</td>
</tr>
<tr>
<td>06</td>
<td>Reading Competency Meet</td>
<td></td>
</tr>
</tbody>
</table>

Completion of level 05 reading satisfies all reading competency requirements for degree/transfer level courses.
General Information

Policy for Students whose Primary Language is Not English
Persons whose primary language is not English are encouraged to take the English as a Second Language assessment in the Assessment Center at both the Panorama and Delano Campuses. Orientation for students whose primary language is not English is scheduled on both campuses as well.

Exemptions
Only students who have completed an associate degree or higher may be exempt from orientation, assessment, and counseling; however, if a student wishes to enroll in a course that has a prerequisite, he/she must show proof of meeting the prerequisite or take the English, reading, or math assessment.

A student may also decline to participate in the matriculation process, but in so doing relinquishes the right to participate in early registration and may not be able to enroll in courses that have prerequisite requirements. Information is available in the Office of Admissions and Records in the Administration building, room 7 and the Counseling Center in the Center for Student Success (CSS) building.

Students have the right to challenge or appeal any allegation of violation of enrollment regulations. Challenges or appeals should be submitted to the Vice President of Student Affairs.

Course Admission Policy
The policy of the college is that, unless specifically exempted by statute or regulation, every course, course section, or class reported for state aid, wherever offered and maintained by the college, shall be fully open to enrollment and participation by any person who has been admitted to the college and, when applicable, a relevant program, and who meets established prerequisites.

Prerequisites
Many Bakersfield College courses have basic skills or course prerequisites. These prerequisites are established to assist students in selecting courses for which they have the entry level skills. Students who believe that they have the entry level skills without the appropriate placement test score or previous course may challenge the prerequisite. Students have the right to:
1. Appeal a prerequisite course requirement because the required course is not available.
2. Challenge any prerequisite believed to be discriminatory.
3. Challenge any matriculation regulations/procedures that have the effect of being discriminatory based on how the services are applied to students.
4. Be provided alternative services for the matriculation process if necessary for ethnic and language minority students and students with disabilities.

Questions about challenges or appeals for a prerequisite or placement regulation/procedure should be directed to Advising and Counseling in the Center for Student Success (CSS) building.

Student Educational Plans (SEPs)
An SEP outlines a suggested course of study for the individual student based on major, transfer plans, and sequence of courses. Students are encouraged to meet with an advisor or counselor or attend an SEP Workshop to develop and update their plan each semester or when a change is made to their major, transfer institution, or other pertinent objectives. Students can make an appointment in the Advising and Counseling Center, located on the lower level of the Center for Student Success (CSS) building www.bakersfieldcollege.edu/counseling or call 661/395-4421.

Bakersfield College’s educational advising and counseling program’s purpose is to assist students in the development of meaningful educational plans which advance their progress toward a certificate, associate degree, or successful transfer to baccalaureate programs at campuses within either the University of California or California State University systems. The Transfer Center and the Advising and Counseling staff also assist students in identifying and understanding the transfer requirements at private colleges and universities. Additionally, academic advising services assist individuals in need of developmental educational opportunities as well as those who need to retool or retrain. Within this context, advisors and counselors assist students in developing educational plans compatible with a diverse set of career and life goals.

The best time to schedule an appointment for your SEP is:
- Fall Semester: September-October
- Spring Semester: February-March

Students who have completed lower division coursework at other colleges and universities and wish to apply that coursework to completion of a Bakersfield College certificate, associate degree, or to a California State University General Education Certification, or to an IGETC certification should have their transcripts officially evaluated. For more information, visit the Admissions and Records page on the student portal at inside.bakersfieldcollege.edu.

Early (Priority) Registration Appointments Bakersfield College recognizes that students who complete all enrollment steps (Orientation, Placement, Testing, Advising and Counseling, and abbreviated and comprehensive Student Educational Plan) are more likely to reach their academic goals. These students are given special registration priority appointments. In order to ensure that students who are progressing successfully toward those academic goals have the opportunity to continue that progress, students who have attempted less than 100 units will be allowed to register earlier than those with over 100 units attempted. For their first semester of registration, students who receive earlier appointments will have completed these enrollment steps. The order of appointment assignments will be as follows:
- Students in special populations such as veterans who have been discharged within the last three years, foster youth, EOP&S, CalWORKS, DSP&S, President’s Scholars, honor’s, MIH program, or athletics.
- Continuing students with less than 100 units attempted at
Bakersfield College and prior year graduates of local high schools.
• New students not included above.

Continuing students who have not completed all four enrollment steps will be assigned appointments during the first few days of open registration based on the date they completed their admission/update forms.

Registering for Classes
All course registration takes place on Bakersfield College’s web registration system. Detailed instructions for the use of this system can be found in the Registration Information on the Bakersfield College website at www.bakersfieldcollege.edu/registerforclasses.

Students must be officially registered or on the official waitlist before attending classes. Registration dates are indicated in the “About the College” section of this catalog and on the Bakersfield College website.

Waitlists
The electronic waitlist allows students to be moved into a class when seats are available. It is a true first-come, first-serve system. Students trying to register for classes that are closed will be able to select waitlist. During the weeks prior to the start of classes, when vacancies occur in classes, the first student(s) on the waitlist will be moved into the class. Students who are on a waitlist should check their registration regularly on the web. They will have ten days to pay for the class once they have moved into registered status. Students will not be charged the enrollment fees for waitlist classes until they are actually enrolled in the class.

Students should use the waitlist to ensure themselves a chance of getting into the classes they want.

Students on waitlists still must attend the first meeting of the class or be dropped from the waitlist. The prerequisite, basic skills, time conflict and repeat checks will prevent ineligible students from moving into the classes.

Students should drop themselves from a waitlist for any class that they no longer wish to take. If a new section of a class is opened at the same day and time as a section with a waitlist, students on the waitlist will be automatically enrolled into the new section.

Maximum Study Load
Students may enroll in a maximum of 19 units per semester and 7 units in summer. Students with strong academic records may be cleared to enroll in more units by completing an overload request form in the Counseling Center.

Minimum Study Load
Students must enroll in a minimum study load in order to meet certain qualifications such as:
1. Certification as a full-time student to the Department of Health and Human Services: 12 units.
2. Approval by the Veterans Administration for training under Chapter 31, 32, 33, 34, 35 or 1606, Title 38 U.S. Code.
3. F-1 Visa (international) student status: 12 units.
4. Eligibility to participate in intercollegiate athletics: 12 units (Repeated courses, previously passed with a C or higher cannot be counted.)
5. Student athletes must maintain a C average (2.0 grade point average) or higher.
6. Eligibility to participate in student government as an office holder: 6 units.

Academic Success and Progression
According to the Kern Community College District Board of Trustees Board Policy Manual section 4C6, students must display academic progress in order to graduate from a program of study or meet minimum requirements for prerequisites.

4D1C - 18 units of study must be completed in a discipline or from related disciplines as listed in the Community Colleges Taxonomy of Programs. Each course counted in this section must be completed with a grade of ‘C’ or better, or a ‘P’ if the course is taken on a pass/ no pass basis.

4D1D - 18 semester units of general education must be completed and shall include at least 1 course in each of the following areas:
1. Natural Sciences
2. Social and Behavioral Sciences
3. Humanities
4. Language and Rationality

A course designated by each College as meeting the Ethnic Studies requirement must be taken in at least one of these 4 areas. Courses counted to meet this general education requirement must be completed with a grade point average of 2.0 or better.

4D2B2 - The colleges may award locally approved certificates with fewer than 18 units that certify that a student has completed a credit course or a sequence of credit courses to meet documented workplace needs/ standards by demonstrating a level of knowledge, skill(s), and ability(ies) sufficient to earn a minimum grade of ‘C’ in each required course.

Repeating a Course
Certain Bakersfield College courses are identified in the course description sections of the catalog as repeatable, with the number of times they may be repeated indicated.

Other courses may be repeated once for credit if a grade lower than C or its equivalent has been earned. The original and subsequent grades will remain a part of the student’s permanent record. The earlier attempts will be disregarded in the student’s GPA calculation.

If a student earns any combination of ‘D’, ‘F’, or ‘W’ on two attempts in a course taken in the Kern Community College District, that student can only register for a third time with the signature of the faculty chair of the department on a Request to Repeat a Course Beyond the Limit form. This form is available from the Office of Admissions and Records in the Administration building, room 7.

In compliance with Title 5 California Code of Regulations Section 56029, certain course repeats may be authorized for students with disabilities following DSPS policies and procedures.
Courses may also be repeated if the previous grade is at least in part a result of extenuating circumstances such as verified cases of illness, accidents, or other circumstances beyond the control of the student. Approval to repeat under these circumstances should be obtained prior to registration in the Office of Admissions and Records in the Administration building, room 7. In these circumstances, the previous grade will not be disregarded in the calculation of the GPA.

A student may repeat a course to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. The course may be repeated for credit any number of times, regardless of whether or not substandard work was previously recorded, and the grade received each time shall be included for purposes of calculating the student's grade point average.

The college can provide no assurance that repeated courses will be treated in a similar manner by other educational institutions.

**Remedial Coursework Limitation**
Remedial coursework refers to precollegiate basic skills courses defined as courses in reading, writing, computation, learning skills and English for Multilingual Students, which are designated as non-credit courses. No student shall receive more than thirty (30) semester units of credit for remedial coursework within the Kern Community College District, except for the following:
1. Students currently enrolled in one or more courses of English as a Second Language
2. Students identified by Bakersfield College as having a qualifying disability

**Auditing a Course**
Students who have been admitted to the college may enroll in courses as auditors with the permission of the instructor and subject to the following provisions:
1. Priority shall be given to students who wish to take the course for credit.
2. A student in a course shall not be permitted to change from audit to credit status nor from credit to audit.
3. The cost to audit a class is $15 per unit. (Students enrolled in 10 or more other units will not be charged this fee.)
4. A course audit shall be approved under only one of the following conditions:
   - Participation by audit serves a specific educational purpose necessary to achieve the student’s educational goal
   - Participation by audit benefits other registered participants in performance arts or intercollegiate athletics courses
5. The course instructor and College President or designee shall approve audit enrollments.

Course Audit Forms are available in the Office of Admissions and Records in the Administration building, room 7 beginning on the first day of class.

**Holds that Prevent Registration**

**Financial Holds**
Holds may be placed on a student’s record whenever that student is delinquent or has failed to pay any debt owed to the college or failed to return any library books or other college property or equipment. Students with holds will not be allowed to receive transcripts, certificates or diplomas; have transcripts forwarded; and/or receive other services related to student records. They may not be allowed to register. When the student has cleared the obligation with the Office of Business Services at Bakersfield College, the hold will be removed.

**Academic Standing**
A student who is not in good academic standing will have a hold placed on his/her record until he/she attends an online workshop to make plans to improve his/her grades. These holds will prevent registration.

**Probation**

**Academic Probation**—A student who has attempted at least 12 cumulative semester units shall be placed on academic probation when he/she has earned a cumulative semester grade point average below 2.0.

**Progress Probation**—A student who attempted at least 12 cumulative semester units shall be placed on progress probation when the percentage of all units for which entries of ‘W’, ‘I’, NC and ‘NP’ reaches or exceeds 50 percent.

Students transferring from other collegiate institutions will be placed on probation according to these same standards.

Students on probation may be limited to specific courses and to the number of units for which they may register. The academic status of each student is printed on the student transcript which is updated at the conclusion of each academic term.

**Removal From Probation**
A student on academic probation for a grade point deficiency shall be removed from probation when the student’s cumulative grade point average reaches 2.0 or higher.

A student on progress probation shall be removed from probation when the percentage of ‘W’, ‘I’, NC and ‘NP’ units falls below 50 percent.

**Disqualification**
Any student who is placed on academic probation for three consecutive semesters of enrollment shall be disqualified for admission to classes the following semester unless, during the last semester of enrollment, the student earned a grade point average of 2.0 or higher, in which case the student shall be placed on continued probation.

Any student who is placed on progress probation for three consecutive semesters of enrollment shall be disqualified for admission to classes the following semester, unless during the last semester of enrollment, the percentage of units with entries of ‘W’, ‘I’, NC and ‘NP’ was less than 50 percent, in which case the student shall be placed on continued probation.

**Reinstatement**
A student who is disqualified may be ineligible to attend Bakersfield College. The student may be conditionally readmitted the following semester upon petition to the Advising and Counseling Center.

**Administrative Hold**
If a student is not in good standing with the college, or has any incomplete sanctions due to student conduct, an administrative
of disciplines using non-traditional delivery methods: interac-
tive, online, and hybrid. Dependent upon semester scheduling,
Distance Learning provides additional educational options
to anyone seeking a college education: students dealing with
family and/or job commitments, time limitations or transporta-
tion difficulties, individuals willing to explore a less traditional
presentation of course content, and students who choose to not
come to campus for traditionally presented classes. Regardless of
the mode of delivery, students receive the same course content
described in the catalog and will have the same course expecta-
tions.

Bakersfield College offers a variety of online courses, allowing
students to self-select classes free of any geographic and time
boundaries. It is vital that students have a basic understanding
of computer usage, dependable access to the internet, and know
how to send and receive e-mail.

Bakersfield College interactive courses connect with classrooms
on the Delano Campus, 35 miles north of Bakersfield. Interactive
classes may also connect with classes at Porterville College and/
or Cerro Coso Community College. Instructors may teach from an
origination site at any of the campuses, using real-time two-way
video/two-way audio technology. Students benefit from interac-
tivity with students enrolled at one or more remote locations.

Hybrid courses use the internet as the predominate delivery
method combined with traditional face-to-face classroom
sessions. Students must be able to come to the main Bakersfield
College campus for an orientation session during the semester as
well as have access to and be able to use the internet.

Learning Communities, Compressed, and Accelerated Courses
661/395-4433
Bakersfield College offers learning communities, compressed and
stacked, and accelerated courses. All give students the opportuni-
ty to develop necessary college skills and complete courses while
earning credit for both classes once they complete the sequence.

In a learning community, students are enrolled in two linked
courses, with the same cohort, or group of students. In a learning
community, the courses may have a theme, such as the African-
American Experience Learning Community, which is part of the
African-American Success through Excellence and Persistence
(ASTEPE) program. In a compressed and stacked course, two
sequential courses are combined, which allows students to
complete sequential courses in one semester instead of two or
more. Typically, the content of a single course is compressed into
an eight-week segment, which is followed immediately by the
next course in the sequence, also taught in a compressed format
for eight weeks. Notably, students register for the two sequential
courses or two linked courses at the start of the semester, but will
earn credit for both classes once they complete the sequence.

Bakersfield College continues to offer a variety of learning
communities and compressed and stacked courses that com-
bine a variety of courses, most typically in English, math, and
study skills. At least one option is offered each semester. Check
the schedule of classes under a learning community search to
locate the most current learning community and compressed and
stacked courses being offered.

An accelerated course is a redesigned course that is open to
students who test into more than one level, and that includes
increased support. Currently, students at the English placement
level of 04 (English 60) or 05 (English 50) level are eligible to take
English B53. In this course, students will strengthen their critical
thinking and their ability to develop arguments at the college
level, and those who are successful in English B53 will be eligible
for ENGL B1A. Check the schedule of classes under English to find
available sections of English B53.

Basic Skills/Precollegiate Coursework
Basic skills courses teach fundamental skills in reading, writing,
computation, and study skills that are applicable to any area of
study. They provide open access, support services, basic skills
courses, resources, and equipment and technology to California
Community College students. Basic skills courses are offered in
the Academic Development (ACDV), English (ENGL), English for
Multilingual Students (EMLS), and Mathematics (MATH) Depart-
ments.

The term “Basic Skills” comprises many areas. The essence of
college in general, and basic skills in particular, is to develop skills
which will allow students to think abstractly, understand complex
concepts, synthesize information, solve multi-step problems,
read books and articles, communicate effectively, and leave col-
lege with the ability to live, work, and become involved in issues
and activities within the community (Winston, R. “Basic Skills: the
Promise of Access for California Community College Students.”

Incoming Bakersfield College students take computerized place-
ment tests that determine their entry levels in reading, writing,
and mathematics. Students are encouraged to take their Aca-
demic Development, English, Reading, and Math courses early in
their college career, as research shows that basic skills courses
improve student success rates.

State regulations set a maximum of 30 units for basic skills cours-
es taken by any student. If a student’s skills are such that more
than 30 units will be required to reach college level, that student
will be counseled regarding other possible ways to build those
skills. Exempted from the 30-unit limitation are students enrolled
in English for Multilingual Students (EMLS) courses and students
identified as having a disability.

Delano Campus
661/720-2000
The Delano Campus provides the community with access to Ba-
kersfield College programs and services. Students live in Delano
and the rural communities of northern Kern and southern Tulare counties. Day and evening general education, transfer and vocational courses are available to help students obtain an Associate in Arts degree or technical certification. Student and instructional support services include Counseling, Financial Advising, Educational Advising, Assessment Testing, Disabled Student Programs and Services, Extended Opportunity Programs & Services, Computer Lab, Multi-Subject Tutoring, Admissions, Registration and more. The Delano Campus is located at 1450 Timmons Avenue, Delano, California.

Weill Institute Compliance School and Entrepreneur School
661/336-5010
The Weill Institute is located in downtown Bakersfield at 21st Street and Chester Avenue (with parking and main entry in the parking lot off of L Street). The evening instructional program provides a variety of vocational, general education, and transfer courses. Both semester-length and short-term courses are available.

Weill Institute Business Center
661/395-4104
The Weill Institute Business Center provides economic and workforce development services. The needs of business, industry and the workforce are met with a highly-skilled staff that provide customized training, job skill assessment, bilingual training, performance consulting, organizational development, and many other services. The Business Center also operates the California Compliance School and the Regional Environmental Business Assistance Center.

Also located at the Weill Institute Business Center is the Business Assistance Center, which operates under grants from the U.S. Small Business Administration, the Chancellor’s Office of California Community Colleges, and other agencies. The Business Assistance Center offers free counseling to small business owners and individuals interested in starting a business in Kern, Inyo, and Mono counties. Affordable seminars and workshops are held on a regular basis for practical guidance in owning and operating a small business.

College Fees, Tuition, Books, and Fee Refunds
Community College Enrollment Fees
Enrollment fees are set by the state of California. Enrollment fees are $46 per unit for the 2017-2018 academic year. If the state of California increases the fees, a supplemental bill will be sent to all students.

Nonresident Tuition Fee
Nonresident students are required by state law to pay tuition in addition to enrollment fees. The tuition fee for nonresident students is $212 per unit up to a maximum of 15 units per semester.

California Nonresident Tuition Exemption For Eligible California High School Graduates
A law was passed by the Legislature in 2001 known as “AB 540.” Any student, other than a non-immigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the California State University and the University of California.

Requirements:
- The student must have attended a high school (public or private) in California for three or more years.
- The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam).
- An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

Students who are nonimmigrant (for example, those who hold F (student) visas, B (visitor) visas, etc.) are not eligible for this exemption. The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law. Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration. Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but they will not be classified as California residents. They continue to be nonresidents. Non-resident students meeting the criteria will be exempt from the payment of non-resident tuition. Students meeting the criteria will be classified as AB540. AB540 students will be considered for state aid through the California Dream Act application but not for federal financial aid. Please contact the Office of Financial Aid for details.

To request this exemption, a student must complete the form in the Office of Admissions and Records in the Administration building, room 7 https://www.bakersfieldcollege.edu/sites/bakersfieldcollege.edu/files/AB540_AB2000_Form.pdf. Students may be required to submit additional documentation. Contact the Office of Admissions and Records in the Administration building, room 7 if you have questions.

Student Health Fee
A $13 student health fee has been authorized by the Board of Trustees for all students during the fall or spring semester. The fee is $10 for summer session. The purpose of the fee is to make health-center services available to all students and to provide greater healthcare educational programming.

The following health fee exemptions are authorized by law:
- Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization.
- Students who are attending a community college under an approved apprenticeship training program.

Exemption forms are available in the Office of Admissions and Records in the Administration building, room 7.

Student Center Fee
Bakersfield College students shall be assessed a Student Center Fee of $1 per unit for courses on the main campus up to a maximum of $5 per fall semester and $5 per spring semester. The fee shall not be assessed for summer session enrollment.

Student Representation Fee
A student representation fee of $1 is charged to all students. This fee will be used by the Student Government Association for:
• Attendance at conferences and meetings of student non-partisan organizations.
• Organizational dues and/or special donations to statewide student organizations or any other recognized student lobby association that works on behalf of community college students.
• Purchase of equipment used for lobbying and/or advocacy such as computers, printers, faxes, modems, software, and accessories.
• Subscriptions to newsletters and/or magazines of higher education.
• Travel expenses for lobbying and/or advocacy for students.
• Leadership training, awareness, and information.
• Hosting non-partisan conferences of legislative issues.

**BCSGA Student Services Program**
The purpose of the BCSGA Student Services Program (www.bakersfieldcollege.edu/bcsga/services) is to maintain and strengthen existing programs as well as to establish new programs that will enhance the student experience at Bakersfield College. BC students are eligible to receive the BCSGA Student Services or new validation sticker when the student opts to pay a $15 fee each fall and spring semester. Other incentives include: free copies up to 10 pages per semester, free faxing up to 12 pages per semester, 2 free blue books per semester, 10 free Scantrons per semester, and discounts at more than 400 local businesses with the KVC sticker. The contact the Office of Student Life at 661/395-4355.

**Parking Fees**
Parking is restricted to parking permit holders during all twelve months of the year. A semester parking permit is $40 and a summer permit is $25. Parking permits are not required on weekends. Visitor parking and handicapped parking is enforced at all times. To obtain a student permit go to: www.bakersfieldcollege.edu/campus/parking.

**Books**
It is estimated that the cost of books and supplies will be $650 to $850 per semester for a 15-unit schedule. Books may be purchased or rented at the college bookstore, which is open year-round except during college holidays.

**Refunds**

**Enrollment and Tuition Refunds**
Enrollment and tuition fees will be credited to the student account when applicable, if all classes are dropped and an enrollment fee credit is generated by the transaction. To receive the health fee refund, a student must apply for the refund in the Business Services Office before the end of the second consecutive semester of non-attendance. Summer session is not considered a semester.

**Student Health Fee Refund**
Health fees will be credited to the student account when applicable, if all classes are dropped and an enrollment fee credit is generated by the transaction. To receive the health fee refund, a student must apply for the refund in the Business Services Office before the end of the second consecutive semester of non-attendance. Summer session is not considered a semester.

**BCSGA Student Services Program Refund**
Students may decline the BCSGA Student Services during course enrollment, however, those that waive the fee will be placed on a list of those students ineligible to take advantage of many BCSGA sponsored events. To fill out an appeal form, requesting a refund, come to the office of Student Life (Campus Center, Room 4). Refunds will only be dispersed within the first 2 weeks of the fall and spring semester.

**Attendance Policies**

**Class Attendance**
Regular class attendance is expected of all students enrolled in the college. It is especially important that students attend the first sessions of each class for it is during those classes that instructors may distribute syllabi and course requirements and explain what is expected in terms of attendance. Students enrolled in classes that are full may be dropped by the instructor if they do not attend the first class sessions. Students on a course waitlist should also attend the first class meetings to avoid being dropped.

The attendance policy for each course is established by the instructor and communicated to each class in writing. Attendance policies will be reasonably related to course objectives, the requirements of institutional reporting, and legitimate absences. Instructors are responsible for maintaining accurate attendance and scholarship records.

While it is the responsibility of instructors to communicate attendance policies and to apply them equally to all students, it is the responsibility of students to know the policy in each of their classes and to be aware of their current attendance status. Students who have been absent from a class should notify the instructor of the reason for the absence. Absence in no way relieves students of responsibility for work missed. Excessive absence may result in the student being dropped from the course. After drops of first day absentees and waitlist absentees, instructors may drop a student from a course when absences number the equivalent of two weeks of class recorded from the first day of instruction.

Instructors may give consideration to excusing students from classes to participate in scheduled college activities; e.g. athletics, music, field trips, etc. The student must make arrangements in advance to make up the work to be missed.

Students are responsible for officially withdrawing from any class or classes in which they no longer wish to be enrolled. Non-attendance does not release the student from this responsibility.

**First-Day Drop Policy**
Because many classes become filled and are closed, students in lecture and/or lab courses may be dropped if they do not attend classes during the first two weeks without notifying the instructor.
Students in open entry courses may be dropped if they do not begin attending during the first week of classes.

Distance Learning Attendance and Non-Participation Policy
All students enrolled in distance learning courses must log in to each course and complete any assignment or other activity, to be determined by the instructor, that are required during the first week. Students who fail to complete first week assignments/activities within the instructor’s deadline may be dropped.

After the first week and during the time period before the final withdrawal date, “students are responsible for officially withdrawing from any class or classes in which they no longer wish to be enrolled,” as stated in the Bakersfield College Catalog. (See the catalog section “Withdrawing from Classes” for additional details.)

The Bakersfield College Attendance Policies: Class Attendance states that “instructors may drop a student from a course when absences number the equivalent of two weeks of class recorded from the first day of instruction.” In the case of distance learning, “absences” shall be defined as “non-participation.” Instructors may drop students after the equivalent of two weeks of non-participation from the first day of class. Non-participation shall be defined as, but not limited to:

- Not following the instructor’s participation guidelines as stated in the syllabus
- Not submitting required assignments
- Not contributing meaningful discussion in required chat rooms, discussion boards, or other online forums
- Not participating in scheduled activities
- Failure to communicate with the instructor as required

It should be noted that simply logging into the course does not constitute participation. Students must demonstrate that they are actively participating in the course by submitting required assignments, contributing to discussion forums, etc. as outlined above.

Withdrawing from Classes
Students are responsible for officially withdrawing from any class, classes, or waitlist in which they no longer wish to be enrolled. After registration has been completed, and within the withdrawal date guidelines, students may drop a class or classes through the web registration system. Non-attendance or non-payment does not release the student from this responsibility and may result in a failing grade being awarded.

Within the withdrawal date guidelines, instructors may drop students from a course for nonattendance, disruption, or failure to meet the requirements of the course.

A student who withdraws or is dropped from a semester-length course through the 20 percent date of any term will not have the course included on the permanent record. A ‘W’ will appear on the permanent record for courses dropped between the 20 percent date and the 60 percent date of the term. No ‘W’ grades may be issued after the 60 percent date. In courses other than semester length, the instructor or Office of Admissions and Records in the Administration building, room 7 should be consulted regarding withdrawal date deadlines.

A student may contact the Office of Admissions and Records in the Administration building room 7, regarding the procedure to drop or withdraw after the final withdrawal date deadline if there are verifiable extenuating circumstances. Examples of verifiable extenuating circumstances may be: accidents, illness, death of an immediate family member, or other circumstances beyond the control of the student. This must be done by the last day of classes and prior to the beginning of the final examination period for the term in which the withdrawal will apply. Withdrawal after the end of the 14th week of the semester (or 75% of the semester, whichever is less) when the college has authorized such a withdrawal in extenuating circumstances, after consultation with appropriate faculty, shall be recorded as a ‘W’.

A ‘W’ is not used in calculating grade point averages, but excessive ‘W’ will be used as factors in progress probation and disqualification. Students who find it necessary to withdraw from the college are required to return all check-out supplies, equipment and library books, and pay all fines and debts owed the college.

Transcripts
Bakersfield College has partnered with Credentials Solutions to accept transcript orders via internet through a secured site. Credentials Solutions the designated agent for processing and sending official transcripts, including electronic EDI transcripts and PDF transcripts. Credentials Solutions has been granted the authority to deliver all such transcript requests on behalf of Bakersfield College and to respond to any inquiries regarding these transactions.

The first two transcripts (lifetime) a student orders are FREE of charge and processed through Bakersfield College. Fee will be deducted at the end of the order if eligible. To order your transcripts please go online to:
https://www.bakersfieldcollege.edu/records/transcripts.

Verification of Enrollment
Current Semester
The Office of Admissions and Records in the Administration building, room 7 will complete a verification of enrollment upon written request by the student. A fee of $2 is charged for each verification. The $2 fee is waived for financial aid academic progress verification.

Students are considered a student of Bakersfield College when students have completed the matriculation steps, and have fully enrolled into a course. A student is no longer considered a student when either a student has completed a course of study or has been inactive with Bakersfield College courses for more than 6 consecutive months.

Past Semester(s)
Past semester(s) can be verified by ordering an official transcript.

Student Schedule of Classes
Individual student class schedules are available on ‘Inside BC’ at www.bakersfieldcollege.edu.
Student Services

Counseling and Advising Department
661/395-4421 (Main Campus)
661/720-2000 (Delano Campus)

Program Mission Statement:
Academic Advising and Counseling at Bakersfield College is an on-going, intentional, educational partnership dedicated to student academic success. The college is committed to an academic advising and counseling system that guides students to:

- Discover and pursue life goals;
- Support diverse and equitable educational experiences;
- Advance students’ intellectual and cultural development; and
- Teach students to become engaged, self-directed learners and competent decision makers.

Comprehensive academic and vocational advising and counseling services are available to all Bakersfield College students in the Advising and Counseling Center, located on the lower floor of the Center for Student Success (CSS) Building on the Panorama Campus and at the Delano Campus.

Educational advising for:
- Career and Technical majors is available in FACE 16 (395-4089)
- Allied Health students is available in MS 153 (395-4476)
- Science, Technology, Engineering, and Mathematics majors (STEM) in SE 40 (395-4811)
- Student athletes in GYM 9 (395-4681)
- Veterans in CC (395-4312)

Counselors and advisors are able to provide students with guidance in the following areas:
- Reviewing student assessment (placement) test results and other information to determine appropriate course options
- Exploring academic and educational goals and identifying possible educational options
- Developing abbreviated and comprehensive educational plans
- Explaining certificate programs and degrees available at Bakersfield College
- Assisting with identification of transfer options and course requirements for University of California (UC), California State University (CSU), independent, and out-of-state institutions
- Providing referral information to other student support service programs on the BC and Delano campuses, as well as to other off-campus resources.

In addition to one-on-one advising and counseling sessions, the center also provides answers to questions, drop-in advising, New Student Counseling workshops, Educational Planning workshops, and transfer-related workshops throughout the academic year. Counseling faculty also teach student development courses for educational planning, career development, and student success. Students will find these courses listed in the online class schedule under “Student Development.”

Other Advising and Counseling functions include:
- Outreach/support to incoming high school students
- Orientations, both face-to-face and online sessions
- International Students Program
- Support for students on probation

The Advising and Counseling Center on the main campus is located in the Larry Robinson Counseling Center, on the lower floor of the Center for Student Success (CSS) Building. In the Delano Center, Counseling Services are located in Science and Technology and the A&R buildings at the Delano Campus.

Follow Up Support Services
Helping you stay in college is important to us. We realize that there are many reasons why students fall behind in their work, drop classes, and perform lower than the required minimum cumulative grade point average of 2.0. Advisors, counselors, and other support staff will work with students experiencing difficulty. If you fall into academic difficulty and are placed on academic or progress probation or dismissal, counselors can help you create a personalized student success plan to get back on track. If you are on probation, a hold will be placed on your registration, and you will be required to take an online probation workshop.

Testing and Placement
661/395-4479
The Bakersfield College Assessment Center offers the following tests: California Common Assessment or AccuPlacer, the College Level Examination Program, the Automotive Excellence Tests, and other testing programs. Students may call the Assessment Center for schedule information.

A student parking permit is required to park in all parking lots. Day permits are available at the dispensers located in all parking lots.

Athletics
661/395-4266
Educational Advisor - Athletics
661/395-4681
Since 1922, the Bakersfield College Athletic Program has provided student athletes with opportunities to compete for one of the most storied community college sports programs in the country: The Bakersfield College Renegades.

The Gil Bishop Sports Center, Memorial Stadium, the Dean and Adah Gay Sports Complex, Gerry Collis Field, and the BC Tennis Courts are home to 20 sports teams populated by approximately 500 student athletes per academic year.

Representing Bakersfield College as an intercollegiate competitor is a privilege that comes with great responsibility. Those wishing to participate must be enrolled in at least 12 units per semester (see educational advisor for details) while maintaining a 2.0 grade point average.

Student athletes also must attend regular practices in season, travel to out of town competitions, and keep themselves in peak
physical condition at the direction of award-winning coaches and certified athletic trainers who specialize in injury prevention. These standards have led to 170 conference titles, 13 state championships, and 10 national championships.

Renegade Student Athletes routinely transfer to four-year NCAA and NAIA schools, and have gone on to professional careers in Major League Baseball, the National Football League, the NBA, and foreign professional leagues, as well as coaching at every level of athletics.

Bakersfield College currently fields Women's teams in basketball, cross-country, golf, soccer, softball, swimming, tennis, track and field, volleyball, and beach volleyball. Men compete in baseball, basketball, cross-country, football, golf, soccer, tennis, track and field, and wrestling.

BC Athletic Program is governed by the California Community College Athletic Association, and is a member of the Western State Conference, Southern California Football Association, and the Southern California Wrestling Alliance.

For more information, visit gogades.com.

California Work Opportunities and Responsibility to Kids (CalWORKs) 661/395-4351 or 661/395-4047

The CalWORKs Program is a state funded program. CalWORKs is designed for students enrolled at Bakersfield College who receive CalWORKs/TANF and are not sanctioned. The program can assist these parents with work opportunities and other educational expenses related to attendance at Bakersfield College. CalWORKs also provides special services which include academic, career, and personal counseling; workshops for academic success; work study; holiday celebration/spring picnic; awards/recognition ceremonies. The Bakersfield College CalWORKs Program additionally offers confidential liaison and advocacy between students, the college, the Department of Human Services, and other community agencies. For additional information on CalWORKs and eligibility for these services, please contact the CalWORKs Office. Interested students must attend an orientation. The Kern County Department of Human Services is also on campus at least once a week during the semester to assist students. The CalWORKs Office is located on the second floor of the Center for Student Success (CSS) Building.

Child Development Center 661/395-4368

The Child Development Center and State Preschool provide a comprehensive early care and education program that serves college student families and their preschool age children. Placement in the program follows state guidelines to assign each family a priority rank based on income and family size. First priority enrollment is given to those with documented need for services who are Kern Community College District students working towards a specific profession or career goal. Our services support and assist student families to successfully complete their college courses and achieve their goals. In addition, the Child Development Center provides demonstration/observation laboratory classrooms for college students majoring in child development, health careers, and other helping professions. Student interns can gain hands-on experience in best practices classrooms working with children under the supervision and direction of our licensed teachers.

The center is primarily funded through the California State Department of Education and is licensed through the California Department of Social Services. All teachers have professional training in child development/early childhood education and are certificated through the California Commission on Teacher Credentialing.

The Child Development Center also has a State Preschool Program on campus offering two part day sessions available to the community. The morning session is 8:30-11:30, and the afternoon session is 12:30-3:30. Both sessions are held Monday through Friday. Lunch is provided for both sessions. Children must be 3-5 years of age and meet state income guidelines.

Applications can be found at www.bakersfieldcollege.edu/student/cdc. Click on Apply Now! Follow the instructions to drop off or mail in the completed application. Applications are also available at the Child Development Center Monday-Friday 7:30 a.m. - 5 p.m.

Computers for Student Use 661/395-4696

Use of the instructional computers by students at Bakersfield College is encouraged. Access to academic computing services is a privilege enjoyed by all students. The Computer Commons, located in the Library, is an open lab. Student workers are available to assist students in the use of these computers.

Unauthorized access or use of academic computing facilities is a violation of Section 502.b-c of the California Penal Code. Offenders will be disciplined and/or prosecuted in accordance with existing college policy and California law. For details of campus computer policies, see the student handbook, which is available from the office of Student Life (Campus Center, Room 4).

Career Center 661/395-4617

The Career Center is located in the Counseling Center. The virtual Career Center website can be found at www.bakersfieldcollege.edu/career-center. The Bakersfield College Career Center provides resources and assists students in making career choices that match their interests and natural talents. Resources include self-assessments and career information. The center is designed to meet the needs of all students in the career development process.

Disabled Student Programs & Services 661/395-4334 (Main Campus) 661/720-2000 (Delano)

Disabled Student Programs & Services assists the college in providing equal access to educational opportunities for students with disabilities. Disabled Student Programs & Services provides reasonable accommodations to students with documented physical, mental health, and learning disabilities who are enrolled in classes through Bakersfield College. The department provides accommodations and support services which may include, liaison with California State Department of Rehabilitation and other community resources, test taking assistance, special equipment, mobility assistance, note taking, assistive computer technology, special classes, sign language interpreters, written materials in alternate format, and learning disability assessment. These
services are intended to prepare and support students to participate on an equal basis with their non-disabled peers. For college material in alternate format, contact Disabled Student Programs & Services.

Extended Opportunity Programs and Services (EOP&S) and Cooperative Agencies Resources for Education (CARE) 661/395-4351
The EOP&S Program is a state funded program serving students from low-income and educationally disadvantaged backgrounds. Services include academic, career, and personal counseling, peer mentoring, financial aid advising, scholarship information, transfer assistance, books, and other support services. The EOP&S Program’s primary goal is to encourage the enrollment, retention, and transfer of students with educational disadvantages to facilitate the successful completion of their goals and objectives in college. Students must complete the Free Application for Federal Student Aid (FAFSA) to determine eligibility and be enrolled in full-time coursework (12 units).

The CARE component offers additional grants and/or services to full-time students who are single parents, TANF recipients, and have at least one child under the age of 14. CARE participants must qualify for financial aid. Services offered include peer mentoring, counseling, tutoring referrals, single-parent workshops, follow-up support, and special events.

For additional information on EOP&S/CARE and eligibility to receive these services, please contact the Office of EOP&S/CARE. The Office of EOP&S/CARE is located on the second floor of the Center for Student Success (CSS) Building. EOP&S services are also offered at the Delano Campus.

To apply, print the EOP&S application found at www.bakersfieldcollege.edu/student/eops and submit to the Office of EOP&S.

Financial Aid 661/395-4428 (Main Campus) 661/725-2011 (Delano Campus)
Students seeking financial assistance to meet the costs of education are encouraged to contact the Office of Financial Aid, located in the Center for Student Success (CSS) Building (CSS 150). A variety of grants, scholarships, and part-time employment opportunities are available for students who qualify on the basis of financial need, enrollment in six or more units leading to a degree or certificate, and satisfactory academic progress.

All students are encouraged to complete the Free Application for Federal Student Aid at www.fafsa.ed.gov or a California Dream Application at https://dream.csac.ca.gov/ to be considered for the following programs. The financial aid priority filing date is March 2.

Board of Governors Waiver
The Board of Governors Waiver is supported by the state of California and waives the enrollment fees for eligible California residents. The Board of Governors Waiver is available for students who have already qualified for other types of financial aid and for students who have exceptionally low income including recipients of TANF, SSI, or General Assistance.

BOG Fee Waiver Requirements
Once you’ve qualified for the BOG Fee Waiver, it is important to ensure that you are meeting the academic and progress standards in order to avoid losing the fee waiver:

- Academic – Sustain a GPA of 2.0 or higher
- If your cumulative GPA falls below 2.0 for two (2) consecutive primary terms you may lose your fee waiver eligibility
- Progress – Complete more than 50% of your coursework
- If the cumulative number of courses you successfully complete falls below 50% in two (2) consecutive primary terms you may lose your fee waiver eligibility.
- Combination of Academic and Progress Standards
- Any combination of two consecutive terms of cumulative GPA below 2.0 and/or cumulative course completion less than 50% may result in loss of fee waiver eligibility.
- You will be notified within 30 days of the end of each term if you are being placed on either Academic (GPA) and/or Progress (Course Completion) probation. Your notification will include the information that a second term of probation will result in loss of fee waiver eligibility. After the second consecutive term of probation, you may lose eligibility for the fee waiver at your next registration opportunity.

If you have further questions BOGW appeal process, please contact the Admissions and Records Office for clarification.

Federal Pell Grant
Federal Pell Grants are a grant program based upon need, cost of attendance, and level of enrollment.

Book Vouchers
Book vouchers are available for Pell Grant-eligible students to purchase books and supplies.

Cal Grant A
Cal Grant A is for low to middle incomes students enrolled in the Baccalaureate program

Cal Grant B
Cal Grant B is for students from disadvantaged and low income families.

Full Time Student Success Grant
FTSSG is a financial aid program for Cal Grant B recipients attending a California community college full-time.

Cal Grant C
Cal Grant C is for students enrolled in a vocational program.

Extended Opportunity Program and Services (EOP&S)
Extended Opportunity Program and Services is a state-funded program offering access and retention services, including books, for low-income, educationally disadvantaged students.

Cooperative Agencies Resources for Education (CARE)
Cooperative Agencies Resources for Education is a state-funded program offering supportive services and financial assistance for low-income, single parent EOP&S students.

Federal Supplemental Educational Opportunity Grant
Federal program that provides additional grant assistance for students with exceptional financial need.
Federal Work Study
On campus employment is available through Federal Work Study, a federally funded program for students who can demonstrate financial need and enrollment in six or more units. Employment is used to fund college expenses.

Full Time Student Success Grant
FTSSG is a financial aid program for Cal Grant B recipients attending a California community college full-time.

Scholarships
Cash awards provided by the Bakersfield College Foundation and local groups and organizations for students who can demonstrate academic merit and/or financial need.

Satisfactory Academic Progress
To be eligible to receive federal and state aid, you must be maintaining progress toward a degree, certificate or transfer. Maintaining SAP means that you must: 1) complete at least 67% of the units you attempt (pace calculation); 2) maintain a cumulative institutional GPA of 2.0 or higher; and 3) complete your educational program within the Maximum Timeframe allowed.

CashCourse
A personal online financial tool to assist students with building essential financial skills. CashCourse promotes positive money management skills to students and recent graduates. To access CashCourse visit: http://www.cashcourse.org/

Information concerning financial aid programs at Bakersfield College can be obtained by personal contact, by phone, or at www.bakersfieldcollege.edu/finaid. After you have applied for financial aid, you may check your financial aid status by logging in to InsideBC at inside.bakersfieldcollege.edu.

Student Health and Wellness Center
661/395-4336
The Student Health and Wellness Center is located in the Campus Center. To schedule appointments for any services, come to the clinic. Walk-ins are also welcome.

Medical Services
The Student Health and Wellness Center provides diagnosis and treatment of a wide variety of general medical conditions.

The services meet many student healthcare needs, including acute conditions such as fevers, respiratory illnesses, stomach pains, sprains and strains, skin rashes, and minor surgical procedures. The Center also treats and manages patients with chronic conditions such as asthma, diabetes, and other diseases. Physicals, TB testing, and some vaccines are available free of charge. Students can access medical services free five times per semester. Student health insurance coverage is available for campus-related injuries.

Health-related literature and a variety of over-the-counter medications are available free of charge.

Mental Health Services
The Student Health and Wellness Center offers services to address students’ mental health concerns. Students are eligible to receive six free one-hour short term counseling (talk therapy) sessions per semester. Group therapy self-improvement classes are also available.

Clinica Sierra Vista-Delano Campus
Mental Health
661/720-2003
Medical
661/725-4780
Students at the Delano Campus receive free medical and mental health services from Clinica Sierra Vista. Delano Campus students can access MAPS services, free over-the-counter medication, and health-related literature in the Delano Science and Technology Building. Student health insurance coverage is available for campus-related injuries.

Student Employment
661/395-4550
Student Employment assists students and alumni in finding both part and full-time jobs. The center offers various workshops and assistance with job search strategies, resume writing, interview skills, labor market information, job coaching, and skills identification. The College Central Network website is the central location for both on and off-campus job postings. The website also provides information about Bakersfield College career events, workshops, hot job e-mails, and access to community employers. Visit the Student Employment website at www.collegecentral.com/bakersfieldcollege. Student employment services are free to students and Bakersfield College alumni.

Office of Outreach and School Relations
661/395-4276
The Office of Outreach and School Relations’ primary focus is to facilitate the entry and transition of prospective students into the Bakersfield College community by providing services, resources, and support to enhance academic development and success.

Staff is available to provide general information about the campus, answer questions related to the application process, and to inform students about the many opportunities available at the college. Visit our office and take a tour of the campus.

Office of Student Life
661/395-4355
The Office of Student Life works collaboratively with the Bakersfield College Student Government Association (BCSGA) and the Office of the Vice President for Student Affairs to engage, educate, and empower students to take action in the best interest of the student body and the college community. The Office of Student Life provides learning, leadership, and service opportunities outside the classroom. Research indicates that engagement theory suggests that students involved in any activity on campus or outside of the classroom are more likely to persist and graduate. The Office of Student Life provides participating students the opportunities to develop and hone their leadership skills, ultimately supporting student learning by providing a plethora of programs in which students can be engaged.

The Office of Student Life nurtures a culture that fosters learning outside of the academic classroom by creating an educational environment that connects the campus community to the importance of processes that lead to student self-governance. The Office of Student Life fosters the development of students’ civic responsibility, community engagement, leadership, and personal growth. Through innovative experiences in a co-curricular classroom, the Office of Student Life engages students in meaningful interactions and hands-on skill development that fosters aca-
demic progress, student success, social justice, and citizenship while serving the diverse breadth and scope of the Bakersfield College’s student community through recruitment, persistence, retention, and graduation efforts. The meaningful interactions are the root of our student advocacy that contributes to effective pathways via the leadership and service opportunities provided.

The Office of Student Life provides advising to BCSGA’s appointed and elected officers, all student organizations, and its entities. Additionally, the Office of Student Life provides learning opportunities for students to enhance their overall educational experience through involvement with the programs and services funded by BCSGA, the college, and the community. The Office of Student Life makes a concerted effort to recruit, educate, inform, and retain students through student organizations, the student government, and the assorted student activities and workshops hosted. To that end, the Office of Student Life supports student organization development whose focus is to build community through groups focused on academics, culture, campus life, specific interests, community service, and social bonding.

The Office of Student Life recognizes that its mission, in cooperation with the learning mission of the College, is accomplished through cultivating a personal standard of ethics and values while providing opportunities that enhance a sense of community between students, the campus, and the local community. Therefore, the Office of Student Life supports Bakersfield College’s mission and core values by contributing to student access, and fostering students’ abilities to think critically, communicate effectively, and demonstrate competencies and skills.

For more information, visit www.bakersfieldcollege.edu/studentlife

Bakersfield College Student Government Association 661/395-4614
Bakersfield College Student Government Association (BCSGA) is the student government at Bakersfield College that voices student concerns. BCSGA presents student opinions, needs, and concerns to such groups as the College Council, the State Student California Community College, and many campus- and district- wide committees. BCSGA also allocates Campus Center and Representation fees to programs and services that directly benefit students. Students are urged to become familiar with the BCSGA constitution and to become involved with the student government. BCSGA meetings are held biweekly and are open to the public. Meeting times are posted on the BCSGA website.

BCSGA has implemented the BCSGA Student Services Program to maintain and strengthen existing programs as well as to establish new programs that will enhance the student academic experience at Bakersfield College. BC Students are eligible to receive a the student services or new validation sticker, when the student opts to pay a $15 fee each fall and spring semesters. To receive your services, bring your BC Renegade Card to the Office of Student Life (Campus Center, Room 4) during regular office hours. Funds collected from the fee are used to support entertaining, diverse and educational events around campus and student organizations. You can enjoy access to concerts, comedy shows, guest lectures, dances and other special events for little to no cost.

Signature BCSGA events include homecoming and traditional events, diversity activities, student forums, Health Fair, free food, student organization funding, leadership workshops, etc. These events are a great way to meet new students while having fun on campus.

The authority of BCSGA is contained within the Executive Board and Student Senate which is comprised of 30 student officers. The President, Vice President, Director of Student Organizations, and 12 Senators are elected by the students each spring semester. All other positions in the government are appointed by the President. All official actions undertaken by BCSGA stem from the decisions of the Executive Board and Student Senate.

For more information, visit www.bakersfieldcollege.edu/bsga

Student Conduct 661/395-4614
The Board of Trustees of the Kern Community College District, in support of public education and the exercise of general supervision of the campuses of the district, believes that student conduct must reflect the standards of good behavior expected by society. Since public education is furnished by the people of the district, it becomes a privilege for students to have this opportunity to further their education.

When working with student complaints, sexual harassment, discrimination, students with reported behaviors, academic integrity, or students of concern, the Office of Student Life at Bakersfield College reviews, investigates, and works with each student case carefully while integrating several student development theories that model after the restorative justice practices. The fundamental premise of restorative justice practices is to engage with the student to lead to a helpful outlook, more cooperative and productive interactions, with students becoming more likely to make positive changes when the Office of Student Life and the Bakersfield community interact with them. It has a greater impact on student learning and success than the typical punitive models. The Office of Student Life approaches restorative justice with five objectives in mind to assist the student through their development.

1. Reflecting with the student in question about their purpose through self-authorship giving them constructive instruction that allows for self-reflection and clear understandings of self-beliefs.
2. Aiding the students to self-acknowledge their responsibility and resulting in a willingness to gear their situation toward a positive outcome.
3. Providing and connecting students to various on and off campus resources in hopes to achieve positive student success.
4. Assisting the students in connecting their energies and interests with meaningful activities.
5. Finding closure while supporting the students through facing their consequences, learning from their situation, and moving past it for future success.

Taking a restorative justice approach requires a philosophical shift and a personable professional to interact with the students, parents, faculty, and the community to repair the balance back into the students’ life, rather than simply following protocol and penalizing. Students are expected to observe a proper standard of conduct, showing such respect for order, morality, personal honor and the rights of others as demanded of good citizens. Failure to do so will be sufficient cause for disciplinary action.
The Student Code of Conduct and the Student Conduct Policy are available in the Office of Student Life, Campus Center 4, or online at www.bakersfieldcollege.edu/studentconduct

Transfer Center
661/395-4881
The Transfer Center offers resources and services to all students. The center facilitates the transition of students from Bakersfield College to a baccalaureate college or university. The center helps reduce the complexity of transferring by helping students through the articulation and transfer agreement process, major planning and preparation, and application/personal statement workshops.

Bakersfield College has guaranteed transfer admission agreements with University of California, Davis; University of California, Irvine; University of California, Merced; University of California, Riverside; University of California, Santa Barbara; and University of California, Santa Cruz. Admission advisors from California State University, Bakersfield are housed in the Bakersfield College Advising and Counseling Center and regularly work with students to ease the transition between Bakersfield College and California State University, Bakersfield. Other college representatives visit campus periodically; a current schedule can be found on the Transfer portal at inside.bakersfieldcollege.edu.

Transfer workshops are offered throughout the year. The Transfer Center maintains current catalog information for California public and private schools. Computers with access to online resources such as www.assist.org to help students with choosing major preparation courses for transfer to California State University and University of California are available. The Transfer Center is located in the Larry Robinson Counseling Center, Center for Student Success (CSS) building.

Veterans Services
661/395-4760
Veteran Certifying Official
661/395-4760
Educational Advisor – Veterans
661/395-4312
Bakersfield College is approved as an institution of higher learning for the training of veterans and military connected dependents entitled to educational assistance.

Educational Benefits for Veterans and Military Connected Dependents
To be eligible for veterans benefits the veteran must have an educational objective for an associate or baccalaureate degree or a certificate of achievement. The Veterans Administration will not pay benefits for courses that do not fit in a veteran’s selected program. The following students may be eligible for veteran’s educational benefits:

1. Veterans who were separated from active duty with the armed forces within the past 10 years who participated in the following programs:
   a. Montgomery GI Bill-Active Duty Educational Assistance program (Chapter 30).
   b. The Post - 9/11 Veterans Educational Assistance Act of 2008 (Chapter 33).
   c. Montgomery GI Bill - Selected Reserve Educational Assistance Program (Chapter 1606).

2. Spouses and/or children may be eligible for:
   a. The Dependent’s Educational Assistance Program (Chapter 35). A student must be the child or spouse of a veteran who is deceased or who has a service-connected disability rated at 100 percent.
   b. Chapter 33 benefits if the veteran elects to transfer benefits.

California Department of Veteran Affairs, College Fee Waiver Dependents of veterans with disabilities (spouses and/or children) may be eligible to receive tuition-free assistance at any California post-secondary educational institution. This program is California Department of Veteran Affairs, College Fee Waiver Program For Veterans Dependents. More information can be found at: www.calvet.ca.gov/VetServices/Pages/College-Fee-Waiver.aspx.

Veteran students using their benefits for the first time students who believe they are eligible for veterans or military connected dependents educational benefits must apply for benefits with the Veteran Administration (VA). Veterans apply by completing VA Form 22-1990 and military connected dependents by completing VA Form 22-5490. An application and further information may be obtained online from the VA website: www.gibill.va.gov via the Veterans Online Application (VONAPP).

In order to remain eligible, students receiving benefits must comply with the college’s veteran standards of attendance and academic progress policy. A student who fails to maintain the school’s academic standards of progress and is suspended or dismissed from school must be terminated from receiving further VA benefits for unsatisfactory attendance, conduct, or progress.

All Veteran Students Must Bring In The Following Documents
• DD-214 – Member, Page 4
• Copy of 22-1990 (Application for Veteran Benefits) or Copy of 22-5495 (Dependent Application for Military Connected Benefits)
• Certificate of Eligibility – This is mailed to Veteran students once they complete the 22-1990 or 22-5490 application
• NOBE – 2384 (Notice of Basic Eligibility) **For Reserve
• Students Only**
• Comprehensive Educational Plan – Make an appointment with Veteran Educational Advisor to complete this form
• Enrollment Card – This card is used to inform the VA how many units the Veteran student is enrolled in and for which semester. The Enrollment Card MUST be completed each semester.
Priority Registration
Priority Registration is available for Veteran students. In order to receive priority registration a student must self-identify as a Veteran by:

1. Providing a copy of their DD-214 Member Page 4, to Admissions Window 6 and using their Educational benefits or
2. Be militarily connected to a Veteran who is using Veteran Educational Benefits: Chapter 35 or Post 911 that was allocated from the Veteran to his/her dependent.

Veteran students who do not want to use their Educational benefits at Bakersfield College but still wants to receive Priority Registration must turn in a copy of their DD-214 Member Page 4 to Admissions, Window 6 and indicate that they only want Priority Registration.

Students who are using the California Department of Veteran Affairs, College Fee Waiver do not qualify for Veteran priority registration.

Veteran Status and Priority for the Allied Health and Nursing Program is as follows

A ‘covered person’ is entitled to priority of service under all WIA Title I funding programs e.g. adult, youth, dislocated workers, 10% funded projects, and National Emergency Grant (NEG). For purposes of this policy, the term ‘veterans priority of service’ means that a covered person shall be given priority over non-veterans for the receipt of employment, training, and placement services provided under that program, notwithstanding any other provision of law.

A ‘covered person’ is one of the following:

1. A Veteran who is an individual who served in the active military, naval, or air service, and who was discharged or released from such service under conditions other than dishonorable (WIA definition);
2. A recently separated Veteran who applies for participation under this title within 48 months after the discharge or release from active military, naval, or air service (WIA definition; or

The Spouse of:
1. A Veteran who died of a service connected disability;
2. A member on active duty who (at time of spouse’s application) is listed as missing in action, captured in the line of duty, or forcibly detained; or
3. A Veteran with a total disability from a service connected disability or one who died while being evaluated for it.

Additional information may be obtained at Window 6 in the Office of Admissions and Records in the Administration building or at the Veterans Lounge.
Academic Student Support Services

Bakersfield College data (below) clearly shows that success increases when students participate in support services ranging from specific writing help, to tutoring, to group study sessions. To ensure students have the support needed to be successful in college, Bakersfield College has a network of academic support services available free of charge. Many of these services are in the second floor of the CSS building, above Counseling Services, and the Aera-STEM Center as well as available in Delano.

**Learning Center**
www.bakersfieldcollege.edu/acdv/learning-center
661/395-4654
The Jerry Ludeke Learning Center, on the second and mezzanine floors at the west end of the Center for Student Success (CSS) Building, is comprised of various learning opportunities and well-trained instructors and tutors. The center offers tutorial services, reading and writing classes, learning and study skills courses, open-entry math courses, a writing center, and a basic skills computer lab. For students who wish to improve their memory, note taking or test taking skills, the Learning Center has short-term courses in these and other study skills subject areas.

Individuals who want to study mathematics may enroll in a hybrid math course in the Learning Center. Courses are taught using a combination of the Internet-based program ALEKS and one-on-one help from instructors in the Math Lab in the Learning Center. Courses are available in Modern College Arithmetic/Prealgebra (ACDV B72), Elementary Algebra (MATH B60), and Intermediate Algebra (MATH B70). Students work at their own pace and have the opportunity to complete more than one course in a semester. More information is available on the Learning Center website, www.bakersfieldcollege.edu/acdv/learning-center.

**Writing Center**
661/395-4735
Students needing help with writing assignments may visit the Writing Center. The Writing Center offers guidance in every stage of the writing process, from generation of essay ideas, through development and organization, to citation of sources. Consultants at the Writing Center can help students take charge of their own writing process and learn new techniques to become more successful writers of college essays. The Writing Center also offers access to computers so students may work on assignments at their own pace. The center takes appointments, but consultants can also assist walk-in students on a first-come, first-serve basis. For a successful 30 minute consultation, students are encouraged to bring assignment sheets, hard-copy notes and drafts, and any other needed material, and should be prepared to discuss assignments with consultant. ESL consultants are also available. More information is available on the Writing Center website, https://www.bakersfieldcollege.edu/writing-center.

**Library**
www.bakersfieldcollege.edu/library
661/395-4461
The Grace Van Dyke Bird Library provides access to information in a variety of ways and formats. In addition to the over 89,000 books in the collection, the library subscribes to 140 periodicals and six online full-text periodical and newspaper indexes. The library is fully automated, with access to the catalog and periodical indexes on campus and via the Internet. Reference librarians are available during library hours to assist with research needs.

Other services available to all library users include:
- Library Research workshop
- Individual carrels for quiet study
- Study rooms for group work
Mathematics, Engineering, & Science Achievement (MESA)
www.bakersfieldcollege.edu/student/mesa
661/395-4776
Bakersfield College’s Mathematics, Engineering, & Science Achievement (MESA) program center, located in the AERA STEM Success Center, is dedicated to serve underrepresented students in the fields of mathematics, engineering, and the sciences and who plan to transfer to a four-year institution to complete a baccalaureate degree. MESA requires participation in at least nine orientation workshops for one semester. In addition, the program requires student involvement in one of the following activities per semester: academic excellence workshop; orientation workshops; professional, career development seminars; or capstone projects. These workshops and activities provide students with critical practice in problem solving techniques as well as exposure to career development in mathematics and science based fields.

MESA offers students book vouchers, scholarships, stipends, free tutoring, field trips to four-year colleges and industries related to students’ fields of study, industry internships, and an environment for studying and networking.

STEM – Science, Technology, Engineering and Math
www.facebook.com/STEMatBC
661/395-4576
Bakersfield College’s STEM department mission is to educate STEM students by providing rigorous educational opportunities that emphasize high standards and continuous improvement in science, technology, engineering, and mathematics and to prepare students for transfer opportunities. The STEM program provides Tutoring, Educational planning, Employment Opportunities, Counseling, and Speaker series talks.

The STEM Disciplines include:
- Biology
- Chemistry
- Physics
- Engineering
- Math
- Physical Science
- Computer Science

Student Success Lab
www.bakersfieldcollege.edu/acdv/student-success-lab
661/395-4654
With hands-on assistance from faculty and teaching assistants, students can access self-paced online learning modules and computer-assisted tutoring on topics like spelling, vocabulary development, study skills, critical thinking, math skills, and standardized test prep. In addition, the Student Success Lab has created individualized study activities that support students in nursing, welding, chemistry, and other disciplines.

The Student Success Lab also offers developmental courses designed to prepare students for college level courses. The Student Success Lab promotes, encourages, and stimulates the personal, social, and intellectual growth of its student base through its commitment to the following goals and values:
- Our belief in a holistic and comprehensive approach to learning and learners
- Our belief that all student learners have different talents and backgrounds
- Our commitment to identify these diversities in order to foster a supportive, student-centered atmosphere that encourages student academic success
- Our commitment to provide and develop activities and services in the lab that prepare students for college level courses

Supplemental Instruction
www.bakersfieldcollege.edu/si
661/395-4202
In contrast to traditional tutoring, supplemental instruction uses peer mentors to support students in class through weekly study sessions. Supplemental instruction leaders (students who have passed the course with a B or better and sit in on the course during the next semester) help bridge the gap between students and instructors, while strengthening their own skills.

Tutoring Center
www.bakersfieldcollege.edu/student/tutoring
661/395-4430 (main campus)
661/720-2076 (Delano Center)
The Tutoring Center offers weekly one-on-one 50-minute peer tutoring sessions in many academic subjects and 15-minute drop-in tutoring sessions in English and math.

Writing Center
www.bakersfieldcollege.edu/writing-center
661/395-4735 (main campus)
661/720-2019 (Delano Center)
The Writing Center helps students with understanding assignments, planning and writing an essay, creating a resume and filling out scholarship applications at the college’s main campus and at the Delano Center. Consultants at the Writing Center provide guidance for every stage of the writing process, from generation of essay ideas, through development and organization, to citation of sources. The Writing Center also offers access to computers so students may work on assignments at their own pace. The center takes appointments, but consultants can also assist walk-in students on a first-come, first-serve basis. For a successful 30-minute consultation, students are encouraged to bring assignment sheets, hard-copy notes and drafts, and any other needed material, and should be prepared to discuss assignments with consultant. ESL consultants are also available.

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Academic Information

Coursework is measured in terms of semester units. A unit equals 18 hours of lecture or 54 hours of lab work per semester in most courses. Lecture courses require additional outside of class work to equal a minimum of 48 hours of student work.

Academic Freedom
The district, the colleges, and unit members will adhere to the following in regard to academic freedom:

1. Education in a democracy depends upon earnest and unceasing pursuit of truth and upon free and unrestricted communication of truth.
2. Faculty members shall be free to exercise academic freedom, including freedom of investigation, freedom of discussion in the classroom, freedom to select texts and other instructional materials, freedom of assignment of instructional exercises, and freedom of evaluation of student efforts.
3. Faculty members acknowledge that in the exercise of academic freedom they have a responsibility to be accurate and comprehensive in making reports, to be fair-minded in making interpretations and judgements, to respect the freedoms of other persons, to exclude irrelevant matters from classroom discussions and instructional exercises, and to make appropriate distinctions between statements of fact made as faculty subject matter specialists and opinions made as private citizens.
4. The college recognizes the fundamental right of the faculty member to be free from any censorship or restraint which might interfere with the faculty member's obligation to pursue truth and maintain his/her intellectual integrity in the performance of his/her teaching functions.

Academic Integrity
Bakersfield College has the responsibility to ensure that grades assigned are indicative of the knowledge and skill level of each student. Acts of academic dishonesty make it impossible to fulfill this responsibility, and they weaken our society. Faculty, students, administrators, and classified staff share responsibility for ensuring academic honesty in our college community and will make a concerted effort to fulfill the following responsibilities.

Any test, paper, or assignment submitted and that bears BC students' name is presumed to be the own original work that has not previously been submitted for credit in another course unless you obtain prior written approval to do so from the instructor.

In all of the assignments, including homework or drafts of papers, students may use words or ideas written by other individuals in publications, web sites, or other sources, but only with proper citation. As a general rule, if citing from a published source or from a web site and the quotation is short (up to a sentence or two) place it in quotation marks; if a longer passage from a publication or web site, please indent it and use single spacing. In both cases, be sure to cite the original source in a footnote or in parentheses. If a student is not clear about the expectations for completing an assignment or taking a test or examination, be sure to seek clarification from the instructor beforehand.

Finally, students should keep in mind that as a member of the BC campus academic community, students are expected to demonstrate integrity in all of your academic endeavors and will be evaluated on their own merits. Students should be proud of their academic accomplishments and help to protect and promote academic integrity at Bakersfield College. The consequences of cheating and academic dishonesty – including a formal written warning, possible loss of grade – are simply not worth it.

Definition of Plagiarism (KCCD Board Policy Appendix 4F7D)
Plagiarism is defined as the act of using the ideas or work of another person or persons as if they were one's own, without giving credit to the source. Such an act is not plagiarism if it is ascertained that the ideas were arrived at through independent reasoning or logic or where the thought or idea is common knowledge.

Acknowledgement of an original author or source must be made through appropriate references, i.e., quotation marks, footnotes, or commentary. Examples of plagiarism include, but are not limited to, the following: the submission of a work, whether in part or in whole, completed by another; failure to give credit for ideas, statements, facts or conclusions which rightfully belong to another; in written work, failure to use quotations marks when quoting directly from another, whether it be a paragraph, a sentence, or even a part thereof; close and lengthy paraphrasing of another's writing or programming. A student who is in doubt about the extent of acceptable paraphrasing should consult the instructor.

Students are cautioned that, in conducting their research, they should prepare their notes by (a) either quoting material exactly (using quotation marks) at the time they take notes from a source; or (b) departing completely from the language used in the source, putting the material into their own words. In this way, when the material is used in the paper or project, the student can avoid plagiarism resulting from verbatim use of notes. Both quoted and paraphrased materials must be given proper citations.

Definition of Cheating (KCCD Board Policy Appendix 4F7D)
Cheating is defined as the act of obtaining, or attempting to obtain, or aiding another to obtain academic credit for work by the use of any dishonest, deceptive, or fraudulent means. Examples of cheating during an examination include, but are not limited to, the following: copying, either in part or in whole, from another's test or examination; discussion of answers or ideas relating to the answers on an examination or test unless such discussion is specifically authorized by the instructor; giving or receiving copies of an examination without the permission of the instructor; using or displaying notes, “cheat sheets,” or other information or devices inappropriate to the prescribed test conditions, as when a test of competence includes a test of unassisted recall of information, skill, or procedure; allowing someone other than the officially enrolled student to represent the same. Also included are plagiarism as defined and altering or interfering with the grading procedures.

It is often appropriate for students to study together or to work
in teams on projects. However, such students should be careful to avoid the use of unauthorized assistance, and to avoid any implication of cheating, by such means as sitting apart from one another in examinations, presenting the work in a manner which clearly indicates the effort of each individual, or such other method as is appropriate to the particular course.

A student charged with cheating or plagiarism is entitled to appeal that charge by means of the college’s Student Code of Conduct. For more information, visit the Office of Student Life or visit www.bakersfieldcollege.edu/studentconduct.

**Academic Standing**

A student whose last completed semester GPA and cumulative GPA are 2.0 or higher and whose accumulated units of 'W' (Withdrawal), 'NP' (No Pass), and/or I (Incomplete) do not reach or exceed 50 percent shall be in good standing.

**Academic Probation**

Students who have attempted 12 or more semester units and who then earns a cumulative GPA of less than 2.0 during the Fall, Spring, or Summer semester shall be placed on Academic Probation for the following semester and will not be able to register until an Academic Success Probation Workshop is completed (a hold will be placed on their registration). A student shall be removed from probationary status when the cumulative GPA reaches 2.00 or higher.

In addition, students on academic probation will be limited in the number of units for which they may register. The academic status of each student is available under Academic Standing in the Registration Status section, on the online transcript in BanWeb, or printed on the student transcript updated at the conclusion of each semester.

**Progress Probation**

Student who have attempted 12 or more units shall be placed on Progress Probation when the percentage of all units attempted for which entries of 'W' (Withdrawal), 'NP' (No Pass), and/or I (Incomplete) reaches or exceeds 50%. Students will be unable to register for classes for the next semester until an Academic Success Probation Workshop is completed (a hold will be placed on their registration). Students shall be removed from probationary status when the percentage of all the units a student has attempted with entries of 'W', 'NP', and/or I are recorded is below 50 percent.

In addition, students on progress probation will be limited in the number of units for which they may register. The academic status of each student is available under Academic Standing in the Registration Status section, on the online transcript in BanWeb, or printed on the student transcript updated at the conclusion of each semester.

**Subject to Disqualification**

Any student who has been placed on Academic and/or Progress Probation for three consecutive semesters of enrollment shall be disqualified for admissions to classes the following semester unless, during the last semester of enrollment, the student earned a GPA of 2.0 or higher or did not receive additional Ws, Is, or NPs, in which case the student shall be placed on Continued Probation.

Each student who is on probation and/or subject to disqualification should attend a face-to-face or online Academic Success Probation Workshop each semester under that status. These workshops are designed to assist students with understanding the reasons for their poor performance and help them to take steps to succeed. Contact the Counseling Department, 661/395-4421, or access the Counseling Department website at www.bakersfieldcollege.edu/counseling for more information.

**Reinstatement**

A student who is disqualified is ineligible to attend Bakersfield College and may be conditionally readmitted the following semester upon petition to the Counseling Department. A readmitted student will be limited in the number of units in which he/she can register. Students must make a counseling appointment to fill out a Reinstatement Petition and make a plan for future success. Contact the Counseling Department at 661/395-4421.

**Academic Renewal**

Previously recorded substandard academic performance may be disregarded if it is not reflective of a student’s demonstrated ability. The District Chancellor shall establish procedures that provide for academic renewal.

At least two years have elapsed since the coursework to be alleviated was recorded; at least eighteen (18) units of satisfactory coursework with a GPA of 2.5 have been completed subsequent to the coursework to be alleviated; and the student would initiate the request for academic renewal. This written petition will go to the Vice President or designee.

**Educational Options**

**Bachelor’s Degree**

Bachelor’s Degrees are awarded after completing at least 120 semester units of study, including major, general education, and graduation requirements. This is the basic degree awarded by “four-year” colleges and universities. Units earned at community colleges count toward the total units needed for a bachelor’s degree if they are transferable. A bachelor’s degree is usually earned in arts (BA) or sciences (BS), although other more specialized options exist, such as the Bachelor of Fine Arts.

**Associate Degrees for Transfer**

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

To view the most current list of Bakersfield College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to A Degree with a Guarantee’s website at www.adegreewithaguarantee.com. Current and prospective
community college students are encouraged to meet with an advisor or counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

**Associate Degree**

Associate Degrees are awarded after completing 60 associate degree or transfer semester units of study to include major and general education requirements. An associate degree certifies the achievement of in-depth knowledge about a field of study (your major) as well as the ability to communicate, use mathematics, think critically, and understand various modes of inquiry. The degrees can be in arts (Associate of Arts) or sciences (Associate of Science). The associate degree may also be thought of as the “first half” of a bachelor’s degree, although most universities do not require that you earn it prior to transfer. If you complete the requirements for an Associate of Arts for Transfer degree (AA-T) or Associate of Science for Transfer degree (AS-T) at Bakersfield College you will earn an associate degree as well as being transfer ready. The associate degree is a college degree, and as such, has value for employment and on a resume.

**Certificates of Achievement**

Certificates of Achievement are awarded after completing courses related to a specific occupational area. The required units range from 12-18 or more. They are intended for students seeking employment, improving their job skills, or pursuing career advancement in a specific career field.

**Job Skills Certificate**

Job skills certificates are awarded upon completion of coursework in a specific occupational area. They are intended for students seeking employment, improving their job skills, or career advancement. The required courses range in unit value from 1-18.

To view the most current list of courses required to complete a certificate, please refer to the Bakersfield College Catalog.

**Catalog Rights / Continuous Enrollment**

Students graduating within five (5) academic years of initial enrollment shall have the option of completing either: (a) the degree requirements of the College catalog in effect at the time of initial enrollment; or (b) any set of revised degree requirements published in a subsequent Bakersfield College catalog. Students graduating more than five (5) academic years after initial enrollment must adhere to the specific degree requirements in effect in any Bakersfield College catalog within the five-year period prior to the students' graduation.

To maintain catalog rights, the student must maintain continuous enrollment during the five (5) year period. Continuous enrollment means the student must earn a grade of “A”, “B”, “C”, “D”, “F”, “NP”, “P”, “I”, “IP”, “RD”, or “W” in at least one course each academic year. For the purposes of continuous enrollment, an academic year begins with the summer semester and includes the following fall and spring terms. Petitions for exceptions should be directed to the Executive Vice President, Academic Affairs. Catalog rights apply only to Bakersfield College graduation and program requirements. If other institutions change their requirements for entrance, graduation, satisfaction of general education patterns, or in other ways it may be necessary for the student to meet the new requirements upon transfer, even if continuous enrollment has been maintained.

**Credits Allowed from Other Institutions**

Students who wish to receive Bakersfield College credits for work completed at other colleges should have official copies of transcripts from such colleges sent to the Office of Admissions and Records in the Administration building, room 7. Upon student completion of a Request for Evaluation in the Office of Admissions and Records in the Administration building, room 7, those transcripts will be reviewed and credit given where appropriate. Bakersfield College only accepts transfer credits from schools that are accredited by regional accrediting commissions of schools and colleges. Transcripts from foreign institutions must be evaluated by an approved international academic credential evaluation service. Information is available at the Office of Admissions and Records in the Administration building, room 7. Evaluations made and credits allowed by Bakersfield College are subject to review and evaluation by any college or university to which a student may transfer. Qualifying as credit toward a Bakersfield College degree or certificate does not guarantee that pass-through general education will be granted. Evaluations are completed within 4 weeks from submission.

**Advanced Placement Program**

Advanced Placement is a program of college level courses and exams for high school students. Bakersfield College grants college credit for students who score a three or higher on Advanced Placement exams. Additional information may be obtained from the Office of Admissions and Records in the Administration building, room 7. A score of 3, 4, or 5 is required for credit in any given course.

Students may submit Request for Evaluation forms to the Office of Admissions and Records in the Administration building, room 7 after they have enrolled at Bakersfield College, and they must have appropriate documentation of their successful completions of the Advanced Placement courses. A maximum of 30 units of credit by examination may be applied to the associate degree.

Refer to the Advanced Placement chart on 37.
## California Community College General Education
### Advanced Placement

Advanced Placement score of 3, 4, or 5 is required for general education certification.

<table>
<thead>
<tr>
<th>AP Examination Units</th>
<th>IGETC</th>
<th>CSU Breadth</th>
<th>CCC GE Areas</th>
<th>Semester Units</th>
<th>Course Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3A/3B</td>
<td>C1 or C2</td>
<td>Humanities</td>
<td>3</td>
<td>ART B1</td>
</tr>
<tr>
<td>Biology</td>
<td>5B and 5C</td>
<td>B2+B3</td>
<td>Natural Sciences</td>
<td>4</td>
<td>BIOL B11</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>2A</td>
<td>B4</td>
<td>Language and Rationality</td>
<td>3</td>
<td>MATH B6A</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>2A</td>
<td>B4</td>
<td>Language and Rationality</td>
<td>3</td>
<td>MATH B6B</td>
</tr>
<tr>
<td>Calculus BC/ AB Subscore</td>
<td>2A</td>
<td>B4</td>
<td>Language and Rationality</td>
<td>3</td>
<td>MATH B6B</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5A and 5C</td>
<td>B1+BC</td>
<td>Natural Sciences</td>
<td>4</td>
<td>CHEM B2A</td>
</tr>
<tr>
<td>Chinese Language and Culture</td>
<td>6A and 3B</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Comparative Government and Politics</td>
<td>4H</td>
<td>D8</td>
<td>Social/Behavioral Sciences</td>
<td>3</td>
<td>POLS B2</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English Language &amp; Composition</td>
<td>1A/3B</td>
<td>A2+C2</td>
<td>Language and Rationality or Humanities</td>
<td>3</td>
<td>ENGL B1A</td>
</tr>
<tr>
<td>English Literature &amp; Composition</td>
<td>1A</td>
<td>A2</td>
<td>Language and Rationality</td>
<td>3</td>
<td>ENGL B1B</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>5A and 5C</td>
<td>B1+B3</td>
<td>Natural Sciences</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>European History</td>
<td>3B/4F</td>
<td>C2 or D6</td>
<td>Social/Behavioral Sciences</td>
<td>3</td>
<td>HIST B4B</td>
</tr>
<tr>
<td>French Language and Culture</td>
<td>6A and 3B</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>German Language</td>
<td>6A and 3B</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Human Geography</td>
<td>4E</td>
<td>D5</td>
<td>Social/Behavioral Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>6A and 3B</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>6A and 3B</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td>JAPN B1 &amp; B2</td>
</tr>
<tr>
<td>Latin</td>
<td>6A and 3B</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>4B</td>
<td>D2</td>
<td>Social/Behavioral Sciences</td>
<td>3</td>
<td>ECON B2</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>4B</td>
<td>D2</td>
<td>Social/Behavioral Sciences</td>
<td>3</td>
<td>ECON B1</td>
</tr>
<tr>
<td>Music</td>
<td>N/A</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td>MUSC B2 OR B4A</td>
</tr>
<tr>
<td>Physics 1</td>
<td>5A and 5C</td>
<td>B1+B3</td>
<td>Natural Sciences</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Physics 2</td>
<td>5A and 5C</td>
<td>B1+B3</td>
<td>Natural Sciences</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Physics C mechanics</td>
<td>5A and 5C</td>
<td>B1+B3</td>
<td>Natural Sciences</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Physics C electricity/magnetism</td>
<td>5A and 5C</td>
<td>B1+B3</td>
<td>Natural Sciences</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>4I</td>
<td>D9</td>
<td>Social/Behavioral Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Seminar</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>6A and 3B</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td>SPAN B1 &amp; B2</td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>6A and 3B</td>
<td>C2</td>
<td>Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>2A</td>
<td>B4</td>
<td>Language and Rationality</td>
<td>3</td>
<td>MATH B22</td>
</tr>
<tr>
<td>Studio Art – 2D Design</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Studio Art – 3D Design</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Studio Art – Drawing</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>U.S. Government and Politics</td>
<td>4H</td>
<td>D8+US-2</td>
<td>Social/Behavioral Sciences or Humanities</td>
<td>3</td>
<td>POLS B1</td>
</tr>
<tr>
<td>U.S. History</td>
<td>3B/4F</td>
<td>(C2 or D6)+US-1</td>
<td>Social/Behavioral Sciences or Humanities</td>
<td>3</td>
<td>HIST B17A</td>
</tr>
<tr>
<td>World History</td>
<td>3B/4F</td>
<td>C2 or D6</td>
<td>Social/Behavioral Sciences or Humanities</td>
<td>3</td>
<td>HIST B2</td>
</tr>
</tbody>
</table>

Note: Advanced Placement Exams that Satisfy UC and CSU requirements should be checked for currency and specific college credit.

http://www.calstate.edu/transfer/requirements/AdvancedPlacementAPCourses.shtml
The student's permanent record will be annotated to indicate the credit was granted by examination. A maximum of 30 units of credit by examination may be applied to the associate degree.

**CLEP - College Level Examination Program**

The College Level Examination Program is a means through which academic credit may be given for nontraditional forms of educational experience. Those who may have reached a college level of education through home or correspondence study, on-the-job training, television courses, military service, or other means may take the CLEP examinations which are offered by the College Entrance Examination Board through the Bakersfield College Assessment Center. Credit for the subject area examination will be awarded upon approval of the appropriate faculty chair. Subject examinations are equated with specific courses listed in the current college catalog. Further information may be obtained from the Office of Admissions and Records in the Administration building, room 7.

Students may submit Request for Evaluation forms to Admissions and Records in the Administration building, room 7 after they are enrolled in classes at Bakersfield College, and they must have appropriate documentation of their successful completions of the College Level Examinations courses. A maximum of 30 units of credit by examination may be credited toward the associate degree.

The college can provide no assurance that credits awarded for credit-by-examination will be treated in a similar manner by other educational institutions.

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### Credit by Examination

Credit by exam, sometimes referred to as a “challenge,” is a method for a student to get credit for a specific course, by proving that he/she already has an understanding of the information contained in that course.

In order to qualify for credit by exam, a student must be currently enrolled in courses at Bakersfield College.

For some subjects, credit may be obtained by taking an exam called a CLEP (College Level Examination Program). A list of the courses for which CLEP tests are approved is available in the Office of Admissions and Records in the Administration building, Room 7, and in the Assessment Center. Department administered exams will not be used to award credit in a specific course when a CLEP exam exists. Credit may also be awarded for the Advanced Placement Program.

Students may receive “credit by exam” by producing work that equals the coursework that is normally completed in a specific course. Faculty in the department where the course exists, must assess the student work and assign a letter grade.

It is the responsibility of the student to work with the specific department to receive credit by exam. The student is also responsible for taking the Credit by Exam Form to Admissions and Records, and paying for the course in order for the course to be posted to the permanent record. It is also the student’s responsibility to obtain a Credit by Exam Form from the Office of Admissions and Records.

The college can provide no assurance that credits awarded for credit-by-examination will be treated in a similar manner by other educational institutions.

--

<table>
<thead>
<tr>
<th>College Level Examination Program - CLEP</th>
<th>Minimum Test Score for Credit</th>
<th>Credits</th>
<th>Equivalent Course/Program - CLEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Law, Introduction to</td>
<td>57</td>
<td>3</td>
<td>BSAD B18</td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>4</td>
<td>MATH 6A</td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>5</td>
<td>MATH B70</td>
</tr>
<tr>
<td>College Spanish, Levels 1 &amp; 2</td>
<td>41</td>
<td>8</td>
<td>SPAN B1 &amp; B2</td>
</tr>
<tr>
<td>Level 1 second semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Growth Development</td>
<td>51</td>
<td>3</td>
<td>PSYC B40</td>
</tr>
<tr>
<td>Precalculus</td>
<td>50</td>
<td>4</td>
<td>MATH B1A</td>
</tr>
<tr>
<td>Psychology, Introductory</td>
<td>50</td>
<td>3</td>
<td>PSYC B1A</td>
</tr>
<tr>
<td>Sociology, Introductory</td>
<td>50</td>
<td>3</td>
<td>SOCI B1</td>
</tr>
<tr>
<td>Spanish</td>
<td>63</td>
<td>8</td>
<td>SPAN B1 &amp; B2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Transfer and acceptance of CLEP credit by another college or university is determined by their re-evaluation and acceptance in accordance to their current policies. An official CLEP score report must be sent to the Office of Admissions and Records for a determination of CLEP credit. When a CLEP exam exists that has been approved by the appropriate dean for credit as a specific course or courses in the current college catalog, department administered challenge exams will not be used to award credit in that specific course. The list above describes courses for which CLEP has been approved.

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The student’s permanent record will be annotated to indicate the credit was granted by examination. A maximum of 30 units of credit by examination may be applied to the associate degree.

### International Baccalaureate Diploma Program

The International Baccalaureate Organization’s Diploma Program is a comprehensive and rigorous two-year curriculum for university-bound students between the ages of 16 and 19. After completing the courses at the participating high school, students take the related IB examination, and the information is printed on their high school transcripts. Bakersfield College recognizes the high scholastic quality of the International Baccalaureate Diploma Program and awards credit or placement as approved. Students...
who plan to enroll at Bakersfield College should submit a copy of their official IB transcript to the Office of Admissions and Records in the Administration building, room 7 for evaluation.

Units for which credit is given pursuant to these examinations will not be counted in determining the 12 semester units in residence required for an associate degree.

Military Credit
Bakersfield College will grant veterans from 2 to 12 elective credits for specific service experience and certain educational training while in the service. Evaluation of such experience and training will be made by the Office of Admissions and Records in the Administration building, room 7. Credit evaluations will conform to the regulations set forth by the State Approval Agency of the California State Department of Education and the recommendations of the American Council on Education. A maximum of 12 semester units will be allowed. On average, a Veteran student will receive the following credits: HLEDB1 (3 Units), Physical Education (2 Units), and General Education (7 Units). Evaluations comply with the regulations and recommendations of the American Council on Education. A copy of the veteran’s DD-214, member page 4 (Report of Separation from the Armed Forces) is required along with military transcripts and prior college transcripts. To request Military Transcripts please visit the following website: https://jst.doded.mil/smart/signIn.do

Students may submit Request for Evaluation forms to the Office of Admissions and Records in the Administration building, room 7 after they are enrolled in classes at Bakersfield College and they must have appropriate documentation of their successful completions of the military courses.

Veterans may use their military basic training to satisfy Area E of the CSU General Education Requirements or the Bakersfield College General Education Requirement by request on transcript order forms.

Tech Prep Program
Bakersfield College Tech Prep Program is an integral part of Career and Technical Education, and encourages high school students to continue education training at the college level by offering college credit for high school articulated courses. It provides a smooth transition from high school to a certificate, associate degree, or transfer at the community college without the need to repeat articulated courses. Bakersfield College currently has articulation agreements with high schools, Regional Occupational Centers and Programs, and adult schools.

Bakersfield College will articulate course credit to students who have completed and met the competency requirements of an articulated course, are admitted and in good standing at the college, and only for the course listed in the college catalog. See your high school counselor to obtain a list of courses that are currently articulated at your school or check out our Tech Prep website at: www.bakersfieldcollege.edu/techprep. Additional information can be obtained from the Office of Career and Technical Education, in the Family and Consumer Education building, room 16.

Repeating a Course
Certain Bakersfield College courses are identified in the course description sections of the catalog as repeatable, with the number of times they may be repeated indicated.

Other courses may be repeated once for credit if a grade lower than ‘C’ or its equivalent has been earned. Only second attempts will replace the first substandard grade. The original and subsequent grades will remain a part of the student’s permanent record.

If a student earns any combination of ‘D’, ‘F’, or ‘W’ on two attempts in a course taken in the Kern Community College District, that student can only register for a third time with the signature of the faculty chair of the department on a Request to Repeat a Course Beyond the Limit form. The form should be submitted to the Office of Admissions and Records in the Administration building, room 7.

Final Examinations
A final examination or evaluation is required in all courses. Instructors will give final examinations or evaluations at the regularly scheduled time.

Grades and Credits
Grading System
Grades are earned and awarded in each course and are recorded on the student’s permanent record at the end of each academic term. Evaluation of student achievement will be made in relation to the attainment of the specific objectives of the course. At the beginning of a course the instructor will explain these objectives and the basis upon which grades are determined. A student’s work is considered satisfactory when he/she maintains an average of ‘C’ (grade point average 2.0) or higher.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Excellent</td>
<td>0 per unit</td>
</tr>
<tr>
<td>B - Good</td>
<td>1 per unit</td>
</tr>
<tr>
<td>C - Satisfactory</td>
<td>2 per unit</td>
</tr>
<tr>
<td>D - Less Than Satisfactory</td>
<td>1 per unit</td>
</tr>
<tr>
<td>F - Failing</td>
<td>0 per unit</td>
</tr>
<tr>
<td>AU - Audit</td>
<td>0 per unit</td>
</tr>
<tr>
<td>P - Passing</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>NP - No Pass</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>I - Incomplete</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>W - Withdrawn</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>IP - In Progress</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>RD - Report Delayed</td>
<td>Not computed in GPA</td>
</tr>
</tbody>
</table>

AU-Audit
This grade is issued to students who enroll in classes in an audit status. It will not count in GPA.

Pass/No Pass
Some courses are offered on a pass-no pass basis; the credit, no credit option will no longer be available. Upon successful completion of such a course, unit credit will be awarded. However, courses taken on a pass/no pass basis are not used in the computation of a student’s grade point average. Regulations for such courses are:

1. A maximum of 12 units may be taken on a pass/no pass basis and applied toward the Associate in Arts or Associate in Science at Bakersfield College.
2. A maximum of three units per semester may be taken on a pass/no pass basis. Exceptions to this rule may be made
by the Executive Vice President, Student Services in cases involving Nursing, Radiologic Technology, and special remedial programs.

3. In courses in which pass/no pass is authorized, the pass grade is granted for performance which is equivalent to the letter grade of ‘C’ or better.

4. Combination classes (pass/no pass or grades) must have an ‘A’, ‘B’, ‘C’, ‘D’, ‘F’ and pass/no pass system.

5. Petitions for pass/no pass must be filed with the Office of Admissions and Records in the Administration building, room 7 no later than the first day of the third week of the semester or the last day of the first week of summer session.

6. When a student has established the basis for grading as pass/no pass or a letter grade, he/she may not elect to change after the established deadline.

7. Courses in which pass/no pass grading may be used must be so designated by the department involved. A department may require majors to obtain letter grades in that department’s major subjects. Pass/no pass forms are available in the Office of Admissions and Records in the Administration building, room 7. The following courses are approved for pass/no pass grading:

- **ACDV** – B5A, B5B, B66, B70A, B70B, B70D, B70C, B70F, B80, B190, B195, B201A, B201B, B201C
- **ADMJ** – B60, B63, B72, B81
- **APPF** – B60CS, B60EC, B60FA, B60FB, B60PE, B60PT, B65XF
- **ART** – B1, B4, B17
- **BSAD** – B9
- **COMP** – B2, B10, B31, B32, B33, B43, B72
- **CRIM** – B1, B2, B3, B4, B5, B7, B8, B9, B10
- **ELET** – B55A
- **EMTC** – B11, B14, B16, B17
- **ENGL** – B60
- **FDSV** – B55I, B71
- **FIRE** – B25A
- **INDT** – B10, B274
- **MDDS** – B52, B66, B68
- **MUSC** – B5B, B23AABC
- **NURS (VNRS)** – all clinical components of nursing courses; NURS B70, B100, B201ABC, B45
- **ORNH** – B2
- **PHED** – B3ADP, B6WT
- **PHIL** – B7 (Philosophy majors may not take Philosophy courses for Pass/No Pass grading)
- **RADT** – B4A, B4B, B6, B7, B10, B13
- **SPST** – B48, B201/B201L
- **STDV** – B1, B2, B3, B6
- **WOOD** – B1, B2, B5, B65A, B65B
- **WEXP** – B250

### I-Incomplete

Students may request that instructors issue I grades when they have an unforeseeable emergency and justifiable reasons at the end of the term. The instructor must submit a statement of the requirements for clearance of the incomplete and also indicate the grade to be assigned in lieu of the I if the requirements are not completed. And must be made up no later than one year following the end of the term in which it was assigned. An I may not be assigned as a withdrawal grade. If the work stipulated is not completed within the time limitation, the grade assigned in lieu of the work being completed will be entered on the permanent record.

### W-Withdrawn

The student has withdrawn from a course or has been dropped from a course by the instructor between the dates indicated in these regulations.

### IP-In Progress

The IP indicates the course extends beyond the normal end of an academic term and work is in progress, or the course is listed as an open-entry/open-exit course, and has been approved by the instructor to register and complete course requirements in the succeeding semester in order to receive credit and a course grade. The grade and unit credit will appear on the student’s permanent record for the term in which the course work is completed. The IP cannot be given more than twice for any particular course. If a student enrolled in an open-entry, open-exit course is assigned an IP at the end of an attendance period and does not re-enroll in that course during the subsequent attendance period, the instructor shall assign a grade (‘A,’ ‘B,’ ‘C,’ ‘D,’ ‘F,’ ‘P,’ or ‘NP’) to be recorded on the student’s permanent record for the course.

### RD-Report Delayed

The ‘RD’ is a symbol assigned by the Office of Admissions and Records in the Administration building, room 7, when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student.

### Grade Reports

Final grades will be made available to students on the Bakersfield College web registration system as soon as possible after the end of each academic term. There will be no additional notification of grades completed or corrected.

### Grade Changes

The instructor of each course shall determine the grade to be awarded to each student. The determination of the student’s grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetence. A judgment to change or expunge a grade for reasons of fraud, bad faith, or incompetence shall be made by the college Chief Instructional Officer after consultation with the student, the instructor, and the Department Chair. All parties noted above shall be notified in writing of any changes. Reasons for any grade change shall be documented.

When students request a grade change, provisions shall be made for another faculty member to substitute for the instructor if the instructor is not available or does not respond to communications within a reasonable length of time, the student has filed a discrimination complaint, or the Kern Community College District determines that it is possible there has been gross misconduct by the original instructor.

### Honors

**Dean’s List**

Special recognition is accorded students who maintain a 3.3 grade point average during a semester in which they accumulate...
at least 42 grade points earned from enrollment in Bakersfield College courses. Students whose academic achievement is at this level are placed on the Dean’s List by the Office of Academic Affairs and are given general recognition on campus and in the community.

**Graduation with Honors**
Students who have completed at least 60 units in degree applicable letter graded courses, have taken at least 12 of those units at Bakersfield College, and who have earned a cumulative grade point average of 3.50 or higher are eligible for graduation with honors.

The honors designation will appear on the diploma and transcript as follows:

<table>
<thead>
<tr>
<th>Grade Point Average</th>
<th>Honor Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.50 - 3.69</td>
<td>Cum laude</td>
</tr>
<tr>
<td>3.70 - 3.89</td>
<td>Magna cum laude</td>
</tr>
<tr>
<td>3.90 - 4.00</td>
<td>Summa cum laude</td>
</tr>
</tbody>
</table>

**Phi Theta Kappa Honor Society**
Phi Theta Kappa membership is based on academic achievement. Students must be enrolled in a regionally accredited institution offering an associate degree program. They must complete a minimum of 12 hours of coursework leading to an associate degree, must generally have a 3.25 grade point average, and must enjoy full rights of citizenship. After induction, members must maintain a GPA of 3.25 or higher. There is a fee for membership in this organization.

**President’s Scholars**
The president of Bakersfield College invites qualified members of each entering freshman class to participate in the President’s Scholars Program using criteria set up by the President’s Scholars/President’s Re-entry Scholars Program. Honorariums of $100 per semester and priority registration are based exclusively on meeting the program’s criteria each semester.

**President’s Re-Entry Scholars Program**
The President’s Re-Entry Scholars are re-entry students who have demonstrated, by their achievement at Bakersfield College, a commitment to academic excellence. This program is designed for students who are 25 years old or older, or students who have been out of school for five years. Honorariums are $100 per semester and priority registration is based on meeting the program’s criteria each semester. An explanation of eligibility requirements and information about the program is available.

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**Renegade Roadmap**

**Learning and Career Pathways at Bakersfield College**
Bakersfield College has organized course work and student support into pathways. These pathways are called Learning and Career Pathways and provide an opportunity for students to explore specific majors within a broader pathway before selecting a major with a goal to minimize excess credits and maximizing the credit for each course within the pathways majors. Often students select a major without adequate career exploration and understanding of expectations within the coursework, for instance, some students select registered nursing as a major but later discover they are more interested in another related area such as public health, radiologic technology or paramedic training. Advising within the pathway would focus on completion of courses relating to all majors before a final major was declared. Pathways give students a sense of identity with the subject area and creates greater motivation to make a real commitment after a semester within the pathways without having to make a serious commitment to a narrow “major” before starting college. There are 9 pathways each supported by a Completion Coaching Community of experts in careers, courses, financial aid, study skills, transfer and employment to connect with students’ needs. These Learning and Career Pathways are:

- Agriculture, Nutrition, and Culinary Arts
- Arts, Humanities and Design
- Business
- Education (K-8)
- Health Sciences
- Industrial and Transportation Technology
- Personal and Career Exploration
- Public Safety and Emergency Management
- Science, Technology and Engineering (STEM)
- Social Sciences, Behavioral Sciences, and Human Services

(See Renegade Roadmap on 42 for the degrees associated with each Pathway)
## Renegade Road
Learning & Career Pathways

### Health Sciences
**Majors of Study**
- Biology – Human Biology
- Health Information Technology
- Kinesiology
- Paramedic
- Public Health Sciences
- Radiologic Technology
- Registered Nursing
- Vocational Nursing

### Science, Technology & Engineering, Math (STEM)
**Majors of Study**
- Biology – General Biology
- Chemistry
- CompTIA
- Computer Science
- Engineering
- Geology
- Math
- Physics

### Industrial & Transportation Technology
**Majors of Study**
- Architectural Drafting
- Bachelor of Science, Industrial Automation
- Brakes
- Cabinet making
- Construction
- Engine Overhaul
- Engineering Technology
- Industrial Drawing
- Industrial Technology – Automotive
- Industrial Technology – Electronics
- Industrial Technology – Manufacturing
- Industrial Technology – Manufacturing
- Industrial Technology – Welding
- Industrial Technology – Woodworking and Cabinetmaking
- Industrial Technology- General
- Powertrain
- Tune Up Emissions

### Arts, Humanities & Design
**Majors of Study**
- American Sign Language
- Commercial Music
- Communication
- English
- Graphic Design
- History
- Journalism
- Media Arts
- Music
- Philosophy
- Photography
- Spanish
- Studio Art
- Theater Arts

### Personal & Career Exploration
**Majors of Study**
For the undeclared student and those exploring a variety of potential careers
- Personal Development
- Skills Building Coursework

Bakersfield College offers a variety of degrees and short term certificates:
- BS in Industrial Automation
- Associates Degrees
- Associate Degrees for Transfer
- Certificates of Achievement
- Job skills

Each Learning and Career Pathway has a Completion Coaching Community of pathway experts designed to help students complete their educational goals.

Revision: March 13, 2017

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### Business
**Majors of Study**
- Accounting
- Administrative Assistant
- Bookkeeping
- Business Administration
- Communication
- Economics
- Office Assistant
- Retail Management

### Public Safety & Emergency Management
**Majors of Study**
- Administration of Justice
- Chief Fire Officer
- Correctional Administration
- Criminal Justice
- Fire Officer
- Fire Technology
- Paramedic
- Wildland Fire Technology

### Agriculture, Nutrition & Culinary Arts
**Majors of Study**
- Agriculture Business
- Agriculture Plant Sciences
- Culinary Arts
- Animal Science
- Dietetic Services Supervisor Program
- Environmental Horticulture
- Food Service Management Option
- Forestry
- Plant Science
- Plant Science – Horticulture Emphasis
- Plant Science – Crops Emphasis

### Social Sciences, Behavioral Sciences & Human Services
**Majors of Study**
- Administration of Justice
- Anthropology
- Communication
- Criminal Justice
- Economics
- English
- History
- Human Services
- Philosophy
- Pre-law Pathway
- Political Science
- Psychology
- Sociology

### Education (Early Childhood / k-8)
**Majors of Study**
- Child Development Master Teacher- Infant Toddler
- Child Development Master Teacher-Special Education
- Child development Teacher
- Early Childhood Education
- Elementary Teacher Education
By 2020 California will need more than 1 million additional workers with degrees. But there is a looming gap in completion of those degrees and transfer to four-year colleges in California, especially for historically under-represented student populations. The strategy to mitigate this gap lies in an institutional redesign beginning with clarifying and streamlining pathways which includes:

- assessing current pathways leading to degrees and transfer (e.g. AD-Ts, C-ID, new paths)
- identification of institutional barriers for student progress (e.g. registration, financial aid)
- alignment of expectations (among K-12, Community Colleges and transfer institutions)

Bakersfield College Guided Pathways System (GPS) will redesign institutional policies, practices, systems and culture with the goal of increasing student completion, while decreasing time and cost to completion through high touch, high tech strategies. This innovation represents a college-wide shift in student support and instructional practice, with the goal to serve as a model for all CCC’s through the California Pathways statewide work and Chancellor’s Office work. It will require very heavy lifting, purposefully not superimposing additional initiatives, but rather transforming current policies and practices creating a manageable framework for current initiatives.
Transfer Guide

What is Transfer?
Transfer is the process of continuing your education at a four-year college or university, usually after completing your first two years (freshman and sophomore levels) at a community college. If planned correctly, the courses that you complete in community college will count towards requirements in your bachelor's degree, just as if they had been taken at the four-year institution. Students enrolled in a transfer program will complete their GE and lower division major requirements before transferring.

Bakersfield College students transfer to a wide variety of universities in California and throughout the United States.

Transfer Services
The Transfer Center is designed to help you during each step of your transfer experience to ensure a smooth and positive transition. A variety of resources are available, including:

• Academic Counseling
• Guidance in researching and selecting a transfer institution
• Individual appointments with representatives from the UC, CSU, and independent colleges and universities
• Transfer workshops including application and Transfer Admission Guarantee (TAG)
• Transfer Admission Agreements with UC, CSU and some private colleges
• A library of catalogs and college publications
• Information on important dates and deadlines
• College research
• Transfer Fairs
• Up-to-Date Transfer website

The Transfer Center is located in the Center for Student Success (CSS) Building or through InsideBC on the Transfer Portal. To make an appointment, call 661-395-4421.

Educational Options
Transfer is one of several different educational options available at Bakersfield College. The college also offers programs and courses designed to prepare students for a new career field or to upgrade work skills related to a current occupation. The following are the most common degrees and certificates awarded:

Vocational Certificates
Certificates are awarded after completing specific courses related to a particular occupational area. They are intended for students seeking quick employment or job skills in a specific career field. Vocational Certificates are awarded by community colleges and some private schools.

Certificates of Achievement
Certificates of Achievement are awarded after completing courses related to a specific occupational area. The required units range from 12-18 or more. They are intended for students seeking employment, improving their job skills, or pursuing career advancement in a specific career field.

Job Skills Certificate
Job skills certificates are awarded upon completion of coursework in a specific occupational area. They are intended for students seeking employment, improving their job skills, or career advancement. The required courses range in unit value from 1-18.

To view the most current list of courses required to complete a certificate, please refer to the Bakersfield College Catalog.

Transferrability of Coursework
Many courses offered at BC will transfer to meet lower-division (freshman and sophomore) requirements of a four-year university. These courses can include transfer general education as well as preparation-for-the major courses. Transfer coursework is the first step to completing the bachelor's and higher degrees.

Choosing a College Major
A major is a field of study that students emphasize in their college education. It is what students “specialize” in with their degrees. It’s important to remember that a major is what students will study at the university they transfer to. At Bakersfield College, students can prepare to transfer into virtually any major at any university—there are literally thousands to choose from. To narrow down the options, students often begin to select their major by one of the following techniques:

• If students have an idea of a career field they want to enter, you can find majors that are related to, or prepare for, that career field. Majors and career fields are not always “perfectly matched.” However, knowing an intended career field can help narrow options.
• To research possible career pathways, visit the Virtual Bakersfield College Career Center, www.bakersfieldcollege.edu/career-center or take Student Development B2, a career decision making course at Bakersfield College.
• If students know what university they want to attend, they can select from the list of majors at that university. Lists of majors at California state universities are available at www.assist.org (click on “Explore Majors”).
• If a students thinks they might be interested in a particular major but are not sure, try taking a general education class in the major. Students often select their major based simply on the courses that are the most interesting to them.
• For a description of the most popular majors in California, visit www.petersons.com/college-search/popular-majors-west.aspx

Associate Degrees for Transfer (AD-T)
California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.
Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

To view the most current list of Bakersfield College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please visit the Bakersfield College transfer services websites at:

www.bakersfieldcollege.edu/transfer
www.adeegreewithaguarantee.com
http://admission.universityofcalifornia.edu/pathways

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

Choosing a Transfer College or University
Each institution may have different transfer requirements, so choosing a transfer college or university early on (or a first, second, and third choice) is important to ensure you complete the right courses. Universities in the United States are organized into different systems and categories. Choosing a transfer institution is important because:

- Each institution has its own program and major requirement.
- Each institution has unique features, including factors like the student body, location, and extracurricular activities.
- You are more likely to do well academically in an educational environment that you have researched and are prepared for.

The most common universities that Bakersfield College students transfer to include:

California State University (CSU)
The CSU system emphasizes undergraduate education (leading to a bachelor's degree) but also offers master's degrees. Professors spend more time in the classroom and less time on research than those in the University of California system. CSUs emphasize preparation for specific careers and are relatively inexpensive for California residents.

CSU Minimum Admission Requirements
Transfer students will be eligible for admission if they meet the following requirements:

- Complete a minimum of 60 CSU-transferable semester units or 90 CSU-transferable quarter units.
- Obtain a minimum 2.0 GPA (2.4 for California non-residents).
- Impacted majors, programs, and colleges may have higher GPA requirements.
- Complete the “Golden Four” (Oral Communication, Written Communication, Critical Thinking, and Mathematics/Quantitative Reasoning) with a grade of C or better. Pass/No-Pass grades are not recommended in these areas.

Students are urged to complete a General Education Pattern in its entirety as CSU GE or IGETC (see appropriate section of this guide for details).

Students are strongly recommended to meet with a counselor to discuss additional requirements for competitive admissions based on major and campus choice.

University of California (UC)
The UC system combines undergraduate education (leading to a Bachelor's degree) with emphasis on graduate programs (Master and Doctor Degrees) and research.

UC Minimum Requirements
Upper Division Transfer students will be eligible for admission if they meet the following requirements:

- Complete a minimum of 60 UC-transferable semester units or 90 UC-transferable quarter units.
- Obtain a minimum 2.4 GPA (2.8 for California non-residents). Note: Admission is competitive and the required GPA can be significantly higher.
- Complete the following seven-course pattern:
  - Two transferable college courses in English composition and one transferable college course in mathematical concepts and quantitative reasoning.
  - Complete 4 transferable college courses chosen from at least two of the following subject areas: arts and humanities, social and behavioral sciences, physical and biological sciences

The UC gives high priority to students who complete major coursework early in their academic career.

Students who complete the Intersegmental General Education Transfer Curriculum (IGETC) pattern prior to transferring to the UC system will meet the transfer eligibility coursework requirement listed above (For details on IGETC, see appropriate section of this guide for details). Students are strongly recommended to meet with a counselor to discuss additional requirements for competitive admissions based on major and campus choice.

Historically Black Colleges and Universities (HBCUs)
Historically Black colleges and universities usually have a majority African-American student body, although students of all races attend them. They may be private or out-of-state public schools. Most are located in the southern United States.

There are 21 HBCUs that have partnered with Bakersfield College to offer students a guaranteed admission. By completing the IGETC requirements or the CSU GE Breadth pattern and obtaining a transfer-level associate degree (60 units) with a 2.5 or higher GPA, students qualify with junior standing to participating HBCUs.

For more information visit:
http://extranet.cccco.edu/HBCUTransfer.aspx

Private Colleges and Universities
Private colleges and universities are not funded by public taxes and also known as independent institutions. Each institution is unique with its own programs, majors, and degrees. Some offer academic programs grounded in a specific religion or philosophy. Others offer programs in only one discipline, such as the arts or technical degrees. Others specialize in providing continuing education to working adults. They are also usually smaller and more focused in academic emphasis than public universities. For more information visit:
www.naicu.edu
**Hispanic Serving Institutions**

The Hispanic Association of Colleges and Universities (HACU) is a national educational association that represents colleges and universities committed to Hispanic Higher education success in the United States (including Puerto Rico), Latin America, and Spain. HACU has 193 member Hispanic-Serving Institutions (HSIs) located in 11 U.S. states and Puerto Rico. To be considered a Hispanic-Serving Institution, the Hispanic enrollment at a college or university must be at least 25 per cent of the total student enrollment.

California is home to 54 Hispanic Serving Institutions including Bakersfield College.

**Tribal Colleges and Universities**

Thirty-five (35) recognized Tribal Colleges and Universities exist in the United States. These are located mainly in the Midwest and Southwest. Tribal Colleges and Universities serve approximately 30,000 full- and part-time students. They offer two-year associate degrees in over 200 disciplines, with some providing a bachelor’s and master’s degree. They also offer 200 vocational certificate programs.

**Out-of-State Colleges and Universities**

These institutions include colleges and universities not in California. They may be public or private and are usually more expensive for out-of-state residents than those who live and pay taxes in the state. This group of colleges offers a huge variety of degrees and graduate programs.

**Western Undergraduate Exchange (WUE)**

Public out-of-state universities charge higher tuitions to non-residents, however participating institutions of the Western Interstate Commission for Higher Education (WICHE) can offer reduced tuition to California residents. WICHE offers the Western Undergraduate Exchange Program (WUE, pronounced “wooo-wee”). If accepted through WUE, California residents are eligible to request a reduced WUE tuition rate of 150% of the resident rate at any of the 145 participating schools, in 14 neighboring states. The WUE reduced tuition rate is not automatically awarded to all eligible candidates. Many institutions limit the number of new WUE awards each academic year, so apply early!

For more information about WUE, please visit http://www.wiche.edu/wue

**Preparation for Major Courses**

For each major at a four-year institution, there are lower division (freshman and sophomore level) preparatory courses designed to prepare students for upper division study (junior and senior level). Based on the availability of courses, students are strongly encouraged to complete as many major prerequisite courses as possible prior to transfer.

Preparation for Major courses for UC and CSU schools can be found on ASSIST www.assist.org. The ASSIST website is designed to provide students with the most accurate and up-to-date information available. ASSIST lists which community college courses are articulated to their four-year counterparts and/or will meet specific requirements. Students can find valuable information about additional screening requirements, if the major is impacted, and if there is a required GPA for a specific major on ASSIST.

Students looking to transfer to a private/independent or out-of-state school, should first access the Bakersfield College Transfer Center portal on InsideBC or talk to a Counselor to find out if Bakersfield College has an articulation agreement with the school of interest.

If Bakersfield College has no articulation with the school, you should go to the school’s undergraduate admissions page and search for transfer information, or contact the school’s admissions department directly to find out the best way you can take courses towards major preparation.

**General Education Courses**

General Education (GE) is a set of courses from a variety of different subject areas that every student must complete in order to earn a bachelor’s degree, regardless of major. The goal is to provide a well-rounded or “liberal” education and develop the knowledge, skills, and attitudes that together help make up an “educated person”.

The completion of GE prior to transfer is not required for admission to most universities. However, students should complete an appropriate transfer GE pattern at the community college. GE requirements not fulfilled prior to transfer must be completed later at the university, which often extends the time and expense of a university education.

Students usually follow one of three transfer GE options. These are:

*The IGETC pattern (see 48)*

IGETC is accepted by all CSU campuses and most UC campuses and majors. IGETC is also accepted by some private/independent or out-of-state universities.

*SciGETC (IGETC for STEM see 51)*

SciGETC is a recommended IGETC track available for students planning to major in science, technology, engineering, or mathematics.

SciGETC curriculum prepares students in high-unit science majors to transfer from Bakersfield College to a four-year institution to begin upper-division coursework in their respective major in a timely fashion and defer to lower division coursework.

Please consult your counselor to establish your educational plan.

*The CSU GE pattern (see 50)*

CSU GE is accepted by all CSU campuses and some private/independent or out-of-state universities. CSU GE is not accepted by the UC system.

*An alternative general education pattern (see 52)*

Alternative general education is usually not recommended for students who plan to transfer to the UC or CSU systems to follow this option. However, students entering high-unit majors such as science or engineering, those transferring to a private/independent or out-of-state institution, or those who plan to apply to only one university may be best served by an alternative general education pattern.

Students are strongly recommended to consult with a counselor to determine which general education pattern is most appropri-
ate for their individual educational goals.

Completion of the IGETC or CSU GE pattern also fulfills the requirements for General Education for a Bakersfield College Associate of Arts or Science degree. Students who complete one of these patterns and additional transfer coursework may also qualify for a Bakersfield College Liberal Arts degree.

General Education Certification (GEC)
General Education Certification is a legal agreement between the UC or CSU systems and the California Community Colleges that permits a student to transfer from a community college to a UC or CSU campus without the need to complete additional lower division general education courses to satisfy university GE requirements after transfer. Bakersfield College will provide an IGETC or CSU GE certification upon completion of GE coursework when requested by the student on the transcript form. This certification may include selected courses taken from other regionally accredited colleges, or credit earned through other means, such as Advanced Placement (AP) test credit. Students do not have "catalog rights" to a certification pattern. Certification is subject to the following conditions:

- For full certification, no fewer than 39 units will be certified; for partial certification, no fewer than 24 units will be certified;
- Only entire areas will be certified.

Pass Along Certification
Students who transfer credits from another California community college often want to "pass along" the general education certifications that they have earned. Any California community college may certify such coursework from another California community college, from a regionally accredited college or university, or from a CSU or UC campus. It is critically important that students transferring coursework from other colleges and universities fill out the Request for Evaluation form available under Admissions and Records, Other Forms or at the Bakersfield College website or at window #6 in the Office of Admissions and Records and have official transcripts sent to Bakersfield College Admissions and Records Department to be evaluated.

C-ID - Course Identification Numbering System
The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Since these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the ASSIST database at www.assist.org for specific information on C-ID course designations. Counselors can always help students interpret or explain this information.

IGETC - Intersegmental General Education Transfer Curriculum
The Intersegmental General Education Transfer Curriculum (IGETC) is a general education pattern that will fulfill all lower division general education requirements at all California State University (CSU) campuses and most University of California (UC) campuses/majors. It is also accepted by some private/independent or out-of-state universities. IGETC is usually recommended for students who intend to transfer to a UC campus, or who are not yet sure of their intended transfer university. Completion of the IGETC pattern is not an admission requirement for transfer to most UC or CSU campuses, nor is it the only way to fulfill the lower division GE requirements of a UC or CSU campus prior to transfer.

Students should consult with a counselor to determine which general education pattern is most appropriate for their individual educational goals.

Rules for using the IGETC pattern
- Each course must have been IGETC approved at the time it was taken. See www.assist.org for a list of certified courses and approval dates.
- Courses may be approved for more than one IGETC area. However, each course may be used to certify only one of the areas it is approved for.
- Students should apply for IGETC certification at the last community college attended prior to transfer. Forms are available under Admissions and Records, Other Forms or at Window 6 in the Office of Admissions and Records.
- AP credit and coursework completed at accredited U.S. colleges and universities may be used to fulfill some IGETC requirements. All such credit must be evaluated through Admissions and Records. Foreign coursework is not acceptable.
- All courses must be passed with a ‘C’ or higher. A ‘C-’ is not acceptable.
- Students transferring to UC need not complete the Oral Communication requirement (Area 1C).
- Students transferring to CSU need not complete the Languages other than English requirement.
- Some UC campuses do not allow use of IGETC for students who were previously enrolled at a UC campus.
- Some community college courses have limitations on the amount of credit awarded by the receiving university. See a counselor, the course description in the college catalog, or www.assist.org for more information.

IGETC is NOT recommended for the following transfer destinations:
IGETC 2017-2018

AREA 1: English Communication - One course from each group. UCs only require Group A and B

GROUP 1A: English Composition (3 units)  
ENGL B1a

GROUP 1B: Critical Thinking (3 units)  
ENGL B2, B3  PHIL B9

GROUP 1C: Oral Communication (CSU Only)  
COMM B1, B4, B8

AREA 2: Mathematical Concepts and Quantitative Reasoning (3 units)

MATH B1a, B1b, B2, B6a, B6b, B6c, B6d, B6e, B22, B23  PSYC B5

AREA 3: Arts and Humanities (9 units) - At least one course from the Arts and one course from the Humanities

GROUP 3A: Arts  
ART B1, B2, B4, B35, B36, B37  MUSC B2, B4a, B4b, B21a, B21b, B22, B23, B27  THEA B12a, B20, B31, B32

GROUP 3B: Humanities  
ASL B2, B3  ENGL B1b, B5a, B5b, B10, B20a, B21, B24, B27, B28, B30a, B30b, B33  HIST B1, B2, B4a, B4b, B15, B17a, B17b, B18, B20a, B20b, B25, B30a, B30b, B33, B36  JAPN B2  MUSC B24  PHIL B6a, B10, B18, B37  SPAN B3, B4

AREA 4: Social and Behavioral Sciences (9 units) - Take three courses from at least two disciplines.

ADMI B40  ANTH B2, B3, B5  CHDV B21  COMM B6  ECON B1, B2  GEOG B2, B5  HIST B1, B2, B4a, B4b, B15, B17a, B17b, B18, B20a, B20b, B25, B30a, B30b, B33, B36  JRNL B1  POLS B1, B2, B3, B16  PSYC B1a, B6, B20, B33, B40  SOCI B1, B2, B20, B28, B36, B45

AREA 5: Physical and Biological Sciences (7-9 units) - At least one Physical Science and one Life Science. One laboratory activity is required. Laboratory activities are underlined.

GROUP 5A: Physical Sciences (One course)  
ASTR B1, B2, B3  CHEM B1a, B2a, B11, B18  ERSC B10  GEOG B1, B3  GEOL B10, B11  PHYS B2a, B4a

GROUP 5B: Biological Sciences (One course)  
ANTH B1  BIOL B3a, B3b, B11, B16, B32, B33  CRPS B5, B10  PSYC B1b

GROUP 5C: Laboratory Science  
ERSC B10L  GEOG B1L  GEOL B10L, B11L  or one underlined lab course from Group 5A or 5B.

AREA 6: Language Other than English - UC Requirement Only - Competence demonstrated by one of the following:

1. Completion of two years of a foreign language in high school with grades of “C” or better.
2. Achieve a score of 3 or higher on a College Board Advanced Placement (AP) Examination in a language other than English.
3. Achieve a score of 5 or higher on an International Baccalaureate (IB) Higher Level examination in a language other than English.
4. Completion of one of the following courses with a grade of “C” or better:

ASL B1, B2, B3, B4  JAPN B1, B2  SPAN B1, B2, B3, B4, B35, B36

CSU U.S. History, Constitution, and American Ideals Certification - Recommended - Take six units from one combination:

POLS B1  HIST B17a, B17b, B20a, B20b, B30a, B30b, B36  HIST B17a and POLS B1 or POLS B12 or HIST B18

Important Notes About IGETC

All courses used on the IGETC pattern must be completed with grades of “C” or better.
The Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a California Community College (CCC) to a California State University (CSU) or University of California (UC) campus generally without the need, after transfer, to take additional lower-division general education courses to satisfy all lower-division general education requirements. However, individual colleges or majors within a CSU or UC campus may not accept IGETC for meeting general education.

The IGETC pattern is most useful for students who want to keep their options open before making a final decision about transferring to a particular UC or CSU campus. Completion of IGETC does NOT guarantee admission, nor is it required for admission.

The IGETC for STEM Pattern (See chart on 51)
IGETC for STEM is a separate IGETC track available for students planning to major in science, technology, engineering, or mathematics (STEM). As of March 2015, UC will accept IGETC for STEM only if:

- A student is earning an associate degree for transfer (ADT) in Biology or Chemistry at a community college that offers IGETC for STEM as an option for those degrees AND
- The UC major program or college the student is applying to accept partial IGETC certification

NOTE: A Course must have a minimum unit value of 3 semester or 4 quarter units to meet requirements of IGETC.

A minimum “C” grade is required for each college course. A “C” is defined as a minimum 2.0 grade points on a 4.0 scale. A grade of credit or pass may be used if the college’s policy states that it is equivalent to a grade of “C” or better.

CERTIFICATION: Bakersfield College can provide full certification (completion of requirements in all areas, partial certification (completing all but two courses) or IGETC for STEM (missing one course in Area 3*, Area 4*, and Area 6*). *These deferred lower-division courses must be replaced with calculus and/or science courses required by the major before transfer.

CAUTION: Partial certification that includes a deficiency in IGETC Areas 1 and/or 2 may indicate that a student does not meet minimum admission transfer requirements. Schedule an appointment with a counselor to discuss your transfer plan and to ensure you meet the transfer requirements.

Californs State University General Education Breadth (CSU GE)

About the CSU GE Pattern
The California State University General Education-Breadth (CSU GE) pattern is one option that allows California community college transfer students to fulfill the lower-division general education requirements of any California State University (CSU) campus. The curriculum consists of a 39-unit pattern with five areas of concentration described in the CSU GE pattern.

For assistance in determining the most appropriate general education program, consult a counselor.

Certification of CSU GE Requirements
Official notification from a California community college that a transfer student has completed courses fulfilling lower-division general education requirements occurs through a process of “certification.” Certification is a legal agreement between the CSU and California Community Colleges.

It is the policy of Bakersfield College to provide certification of general education breadth requirements when such service is requested by the student or whenever a student requests that a transcript be sent to a CSU or UC if the student has completed all of 39 units for certification. Certification of general education courses is generally requested when the CSU GE pattern has been completed.

Additional CSU GE Information and Restrictions
- Completion of the CSU GE pattern is not an admission requirement nor does completion guarantee admission to any CSU campus or program.
- Certification is based on approved courses listed in the Bakersfield College CSU GE pattern or from other regionally accredited institutions. Courses taken at other community colleges must fulfill the appropriate GE breadth area as defined by that college.
- Courses completed at a foreign college or university cannot be used to satisfy requirements for certification.
- Catalog rights do not apply to the CSU GE pattern
- Prior to certification, students must complete a minimum of 24 units in residence at Bakersfield College.
- Official transcripts from all colleges and universities attended must be on file before submitting an application for certification. The application is available in the Admission and Records office.

- UC San Diego Revelle and Eleanor Roosevelt Colleges
- UC Berkeley Colleges of Business, Chemistry, Environmental Design (Architecture), Engineering, Natural Resources, Optometry.
- UC Davis College of Engineering
- UC Irvine Schools of Engineering, Biological Sciences, Physical Sciences
- UC Riverside Colleges of Engineering, Natural and Agricultural Sciences
- UC Santa Barbara Colleges of Engineering, Creative Studies
- UC Los Angeles Schools of Engineering and Applied Science
Intersegmental General Education Transfer Curriculum

IGETC FOR STEM

Important Notes About IGETC for STEM

All courses used on the IGETC pattern must be completed with grades of “C” or better.

The UC will accept the IGETC for STEM if a student is earning an associate degree for transfer (ADT) in Biology or Chemistry at a community college that offers IGETC for STEM as an option for those degrees and the UC will accept partial certification of IGETC.

AREA 1: English Communication - One course from each group. UCs only require Group A and B

- **GROUP 1A: English Composition (3 units)**
  - ENGL B1a

- **GROUP 1B: Critical Thinking (3 units)**
  - ENGL B2, B3

- **GROUP 1C: Oral Communication (CSU Only)**
  - COMM B1, B4, B8

AREA 2: Mathematical Concepts and Quantitative Reasoning (3 units)

- **MATH** B1a, B1b, B2, B6a, B6b, B6c, B6d, B6e, B22, B23
- **PSYC** B5

AREA 3: Arts and Humanities (6 units) - One course from the Arts and one course from the Humanities

- **GROUP 3A: Arts**
  - ART B1, B2, B4, B35, B36, B37
  - MUSC B2, B4a, B4b, B21a, B21b, B22, B23, B27
  - THEA B12a, B20, B31, B32

- **GROUP 3B: Humanities**
  - ASL B2, B3
  - ENGL B1b, B5a, B5b, B10, B20a, B21, B24, B27, B28, B30a, B30b, B33
  - HIST B1, B2, B4a, B4b, B15, B17a, B17b, B18, B20a, B20b, B25, B30a, B30b, B33, B36
  - JAPN B2
  - MUSC B24
  - PHIL B6a, B10, B18, B37
  - SPAN B3, B4

AREA 4: Social and Behavioral Sciences (6 units) - Take two courses from at least two disciplines.

- **ADMI** B40
- **ANTH** B2, B3, B5
- **CHDV** B21
- **COMM** B6
- **CONC** B1, B2
- **GEOG** B2, B5
- **HIST** B1, B2, B4a, B4b, B15, B17a, B17b, B18, B20a, B20b, B25, B30a, B30b, B33, B36
- **JRNL** B1
- **POLS** B1, B2, B3, B16
- **PSYC** B1a, B6, B20, B33, B40
- **SOCI** B1, B2, B28, B36, B45

AREA 5: Physical and Biological Sciences (7-9 units) - At least one Physical Science and one Life Science.

One laboratory activity is required. Laboratory activities are underlined.

- **GROUP 5A: Physical Sciences (One course)**
  - ASTR B1, B2, B3
  - CHEM B1a, B2a, B11, B18
  - ERSC B10
  - GEOG B1, B3
  - GEOL B10, B11
  - PHYS B2a, B4a

- **GROUP 5B: Biological Sciences (One course)**
  - ANTH B1
  - B1L
  - B32
  - B33
  - CRPS B5, B10
  - PSYC B1b

- **GROUP 5C: Laboratory Science**
  - ERSC B10L
  - GEOG B1L
  - GEOL B10L, B11L
  - or one underlined lab course from Group 5A or 5B.

AREA 6: Language Other than English - Optional for Certification - Competence demonstrated by one of the following:

1. Completion of two years of a foreign language in high school with grades of “C” or better.
2. Achieve a score of 3 or higher on a College Board Advanced Placement (AP) Examination in a language other than English.
3. Achieve a score of 5 or higher on an International Baccalaureate (IB) Higher Level examination in a language other than English.
4. Completion of one of the following courses with a grade of “C” or better:
   - ASL B1, B2, B3, B4
   - JAPN B1, B2
   - SPAN B1, B2, B3, B4, B35, B36

CSU U.S. History, Constitution, and American Ideals Certification - Recommended - Take six units from one combination:

- **POLS** B1
- **HIST** B17a, B17b, B20a, B20b, B30a, B30b, B36
- **HIST** B17a and **POLS** B1 or **POLS** B12 or **HIST** B18
• The CSU GE pattern is accepted by some California private and independent colleges and universities in satisfying lower division general education requirements.
• For additional information, consult a counselor.

The CSU GE Pattern (See chart on 53)

The California State University, before awarding a degree, requires students to complete courses or examinations that address:
1. The historical development of American institutions and ideals (Area US-1), and
2. The Constitution of the United States and the operation of representative democratic government under that Constitution (Area US-2), and
3. The process of California state and local government (Area US-3).

This requirement may be fulfilled at a California Community College prior to transfer by completing a combination of courses that satisfies all three areas of the requirement. The requirement may also be completed at a CSU campus after transfer. Courses approved in two US areas may be used to satisfy both areas.

Although this requirement is not part of the General Education requirements for CSU, all students must complete course work in U.S. History, Constitution and Government before graduation from a CSU campus. The courses may also be used to partially fulfill Area D of the CSU General Education Breadth requirements.

Completion of these courses at Bakersfield College is recommended and is not required for Certification.

Students who wish to meet these requirements at Bakersfield College prior to transferring to a CSU campus may take up to six semester units from the combinations below.

POLS B1 and one of the following: HIST B17A, B17B, B20A, B20B, B30A, B30B, B36
or:
HIST B17A and one of the following: POLS B1 or POLS B12 or HIST B18.

Other Transfer General Education Options

Some transfer students are best served by following a general education pattern other than the IGETC or CSU GE patterns. These typically include students who fall into one of the following three categories:
1. Students entering high unit majors such as an engineering or science discipline. Major preparation for the engineering and science fields typically consists of a high number of units. Most universities prefer (and some require) that these preparation for major courses be completed prior to transfer. Therefore, it may be more beneficial for students entering these majors to complete relatively fewer GE courses and more major preparation courses at the community college, while still meeting the minimum admission requirements of the university. Students should review the catalog, other published advising materials of the university and major to which they intend to transfer, and www.assist.org for students transferring to the UC or CSU system and a Bakersfield College counselor for assistance in selecting appropriate courses.
2. Students transferring to a private/independent or out-of-state university. Some private/independent and out-of-state universities accept IGETC or CSU GE, but most do not. Instead, each university has its own unique GE pattern.
3. Bakersfield College has established articulation agreements with some of these institutions. These agreements specify the courses students can complete at Bakersfield College to fulfill the university’s GE requirements. They are available at InsideBC on the Transfer Portal. For information on transferring to a private/independent or out-of-state university, visit the Transfer Center.

4. Students may choose to complete the GE requirements for one specific university, rather than the more universally applicable IGETC or CSU GE patterns, for several reasons:
• Some universities and/or majors do not accept IGETC and instead suggest following the university’s own GE pattern.
• Some students know that they will attend only one university (such as those with a guarantee of transfer admission) and so plan to complete the specific GE pattern for that institution only.
• Some university-specific GE patterns require fewer total units than IGETC or CSU GE.

Each university’s unique GE pattern can be found in their university catalog. In addition, some UC and CSU campuses have posted general education patterns on the ASSIST website at www.assist.org.

Guaranteed Admission Programs

Bakersfield College offers a number of Guaranteed Admission Programs with several schools including: UC Davis, UC Irvine, UC Merced, UC Riverside, UC Santa Barbara, UC Santa Cruz, as well as CSUB Stem majors. Come to the Transfer Center for program requirements or go to the Transfer Portal on InsideBC.

Plan early as some agreements must be signed at least a year in advance of the transfer semester/quarter. Interested students are strongly urged to meet with the Transfer counselor or attend a Transfer Admission Guarantee (TAG) workshop for details on eligibility requirements as they change every year.

Applying to a University

Universities require you to apply and be admitted before you start attending school there. All students who apply must meet the minimum requirements (usually certain coursework requirements and a minimum transferable GPA). Some schools accept all transfer students who meet the minimum requirements, while others go through a selection process to determine which students will be offered admission.

Application dates and deadlines

Different systems have different dates and deadlines to apply. If you plan to attend a private/independent or out-of-state university, you should check with that school to find their application deadline and procedures. The following dates and deadlines apply to California public universities only:
## CSU General Education Breadth 2017-2018

### AREA A: English Language Communication and Critical Thinking (9 units) - Take three units in A.1., three units in A.2, three units in A.3. All courses in Area A must be completed with a grade of “C” or better.

<table>
<thead>
<tr>
<th>A.1. Oral Communication (3 units)</th>
<th>A.2. Written Communication (3 units)</th>
<th>A.3. Critical Thinking (3 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B1, B4, B8</td>
<td>ENGL B1a</td>
<td>ENGL B1b, B2, B3 PHIL B7, B9 COMM B5</td>
</tr>
</tbody>
</table>

### AREA B: Scientific Inquiry and Quantitative Reasoning (9 units) - At least one course each in Areas B.1., B.2, B.4. A grade of “C” or better is required for Area B.4. One laboratory activity is required. Laboratory activities are underlined.

<table>
<thead>
<tr>
<th>B.1. Physical Sciences (One course)</th>
<th>B.2. Life Sciences (One course)</th>
<th>B.3. Laboratory Activity</th>
<th>B.4. Mathematics/Quantitative Reasoning (One course)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR B1, B2, B3 CHEM B1a, B2a, B11, B18, B30a, B30b ERSC B10 GEOG B1, B3 GEOOL B10, B11 PHSC B12 PHYS B2a, B4a</td>
<td>ANTH B1 BIOI B3a, B3b, B11, B16, B18, B32, B33 CRPS B5, B10, PSYC B1b</td>
<td>ERSC B10L GEOG B1L GEOOL B10L, B11L or one underlined lab course from Area B.1. or Area B.2.</td>
<td>MATH B1a, B1b, B2, B4a, B6a, B6b, B6c, B6d, B6e, B22, B23 PSYC B5</td>
</tr>
</tbody>
</table>

### AREA C: Arts, Literature, Philosophy, and Foreign Language (9 units) - At least one course each from Area C.1. & C.2.

<table>
<thead>
<tr>
<th>C.1. Arts</th>
<th>C.2. Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B1, B2, B4, B13, B35, B36, B37 MUSC B2, B4a, B4b, B21a, B21b, B22, B23, B24, B27 THEA B1, B2a, B2b, B12a, B20, B31, B32</td>
<td>ASL B1, B2, B3 ENGL B1b, B5a, B5b, B10, B20a, B21, B24, B27, B28, B30a, B30b, B33 HIST B1, B2, B4a, B4b, B15, B18, B33</td>
</tr>
<tr>
<td>JAPN B1, B2 PHIL B6a, B9, B10, B12, B18, B37 SPAN B1, B2, B3, B4, B35, B36</td>
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### AREA D: Social Sciences (9 units) - Take three courses in at least two different subject areas.

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<tbody>
<tr>
<td>ANTH B2, B3, B5</td>
<td>AGBS B2 ECON B1, B2</td>
<td>ANTH B5 COMM B6 HIST B20a, B20b, B30a, B36 SOCI B28, B36, B45</td>
<td>HIST B25 SOCI B28</td>
<td>GEOG B2, B5</td>
<td>HIST B1, B2, B4a, B4b, B15, B17a, B17b, B18, B20a, B20b, B25, B30a, B30b, B33, B36</td>
<td>AGRI B1 CHDV B21, B42 COMM B6, B7 PSYC B40</td>
<td>ADMJ B40 JRNL B1 POLS B1, B2, B3, B12, B16</td>
<td>PSYC B1a, B6, B20, B33, B40</td>
<td>ADMJ B40 CRIM B1, B5 SOCI B1, B2, B20, B28, B36, B45</td>
</tr>
</tbody>
</table>

### AREA E: Lifelong Learning and Self-Development - Take three units. A maximum of one unit of credit is allowed for PE.

<table>
<thead>
<tr>
<th>AREA E: Lifelong Learning and Self-Development</th>
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</thead>
<tbody>
<tr>
<td>CHDV B21, B42 COMM B2 FORE B1 HLED B1 MDES B35 NUTR B10 PHIL B12 PSYC B1a, B30, B33, B40 SOCI B28 STDV B3, B6 PHED B3adp, B6b1b, B10, B11, B12, B13, B14, B16, B17, B20, B22, B23, B24, B25, B28, B29, B32, B33</td>
</tr>
</tbody>
</table>

### CSU U.S. History, Constitution, and American Ideals Certification - Recommended - Take six units from one combination:

<table>
<thead>
<tr>
<th>CSU U.S. History, Constitution, and American Ideals Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS B1 HIST B17a, B17b, B20a, B20b, B30a, B30b, B36</td>
</tr>
<tr>
<td>HIST B17a and POLS B1 or POLS B12 or HIST B18</td>
</tr>
</tbody>
</table>

### Important Notes About CSU General Education Certification

A total of 39 units will be credited towards General Education. For certification, student must complete at least 24 units in residence.
Graduation Petitioning Periods

<table>
<thead>
<tr>
<th>Semester</th>
<th>Application Period Begins</th>
<th>Deadline to Submit Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2018</td>
<td>August 1</td>
<td>October 15</td>
</tr>
</tbody>
</table>

It is recommended that students apply early in the academic year as a response will be sent from the Office of Admissions and Records to the student’s address which will detail the progress and any courses that may still be needed to complete degree requirements. Students are encouraged to meet with their counselor if there are questions about academic program requirements. Transcripts from Other Colleges

All official college transcripts or other appropriate verifying documents must be on file with Bakersfield College in order for the Office of Admissions and Records to review applications and determine eligibility.

The Office of Admissions and Records notifies students who do not qualify. Students who do not receive such notification should assume that they will graduate if they satisfactorily complete their current term coursework.

Students who qualify will receive their diploma in the mail approximately 10-12 weeks after the end of the semester.

Submit Intent to Register and Transcripts

After offering you admission, most universities require you to send a statement of intent to register (SIR), official transcripts, a deposit, and sometimes additional materials. Review your university admission paperwork for details. Information on ordering transcripts from Bakersfield College is available online at www.bakersfieldcollege.edu/records/transcripts.

Attend New Student Orientation

Most universities offer a new student orientation day (some require that you attend), where you learn about university services and requirements, get academic advising, tour the campus, etc. Review your university admission paperwork for details.

Complete Assessment Tests

Some universities require transfer students to complete assessment tests either prior to enrollment or during their first year of
attendance. Review your university admission paperwork for details.

**Find Housing**
Are you going to live on campus? If so, you will need to apply for campus housing. Check your university online portal account for housing submission dates. If you are going to live off campus, visit your university housing office for listings.

**Send Your Final Transcripts**
You are usually required to send your university a final official transcript after the end of your last regular semester prior to transfer. Information on ordering transcripts from Bakersfield College is online at www.bakersfieldcollege.edu/records/transcripts.

**Meet Immunization Requirements**
Most universities require documentation of immunization against certain communicable diseases like measles or rubella. Review your university admission paperwork for more information.

**Other Transfer Information**

**UC Transfer and Physical Education Courses**
The University of California grants a maximum of four semester units of credit for appropriate Physical Education activity courses. Courses that are subject to this limit are listed as such on the college’s UC Transfer Course Agreement, available on web ASSIST at www.assist.org under the UC Transferable Courses link.

**UC Transfer and Variable Topics Courses**
These courses are also called “Independent Studies”, “Special Studies”, “Special Topics”, “Internships”, “Field Work”, etc. Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus. This usually occurs after transfer and may require recommendations from faculty. UC does not grant credit for variable topics courses in Journalism, Photography, Health, Business Administration, Architecture, Administration of Justice (Criminology), or Library Departments because of credit restrictions in these areas.
The Kern Promise

What is the Kern Promise Program?
The Kern Promise is a commitment to help students complete their Associate Degree for Transfer (ADT) within two instructional years through structure support and priority access to courses. Upon successful completion of The Kern Promise and Associate Degree for Transfer, students will be guaranteed junior standing admission at one of the 23 campuses of the California State University system.

Eligible students interested in participating in the program will need to apply during the application period for the cohort beginning in Fall.

Eligibility Requirements:
- First-time college student
- Graduating from a Kern County high school and apply to join the program during the year of graduation
- Declared an Associate Degree for Transfer Pathway
- Have a completed FAFSA or California Dream Act Application on file
- Eligible for enrollment in college-level English and Math (ENGL B1A and MATH B22, B1A, B23, B4A, Psyc B5, or higher)
- Ability to attend full-time (30 units per year)
- An incoming cumulative (9th - 11th grade) GPA of 2.6

The following matriculation steps must be completed prior to application to the Kern Promise:
- Application to the college
- Orientation
- Assessment

How to apply to the Kern Promise Program
Please see the application website at: www.bakersfieldcollege.edu/sse/bakersfieldpromise/info

Once accepted into The Kern Promise, you are required to attend Promise Day and complete a Promise Agreement, signifying your commitment to the program and its requirements to begin your two-year journey towards graduation and/or transfer. Information about “Promise Day” can be found on the above website.

Majors that qualify for the Kern Promise Program:
- Administration of Justice (AS-T)
- Anthropology (AA-T)
- Biology (AS-T)
- Business Administration (AS-T)
- Chemistry (AS-T)
- Communication Studies (AA-T)
- Computer Science (AS-T)
- Early Childhood Education (AS-T)
- Economics (AA-T)
- Elementary Teacher Education (AA-T)
- English (AA-T)
- Geology (AS-T)
- History (AA-T)
- Journalism (AA-T)
- Kinesiology (AA-T)
- Mathematics (AS-T)
- Music (AA-T)
- Philosophy (AA-T)
- Physics (AS-T)
- Plant Science (AS-T)
- Political Science (AA-T)
- Psychology (AA-T)
- Public Health (AS-T)
- Sociology (AA-T)
- Spanish (AA-T)
- Studio Arts (AA-T)
- Theatre Arts (AA-T)

Benefits of the Kern Promise Program
- Renegade Scholarship financial support*
- Priority registration to ensure you get the classes you need
- A Comprehensive Student Educational Plan (CSEP) that maps out your classes from your first semester to your last
- A Completion Coach to serve as a resource and provide structured support to enable completion of a degree and/or transfer within 2 years
- Connections with peers on similar paths and timelines
- Recognition at the annual Student Leadership and Involvement Awards Ceremony
- Free tickets to home football games

*Financial support in the form of scholarship determined based on incoming GPA
Certificates and Degrees
Students have many different goals in mind when they enroll at Bakersfield College. Some plan to earn a certificate to enhance their job skills while others want to earn an associate degree and/or transfer to a four-year university. Bakersfield College offers the following certificate and degree programs:
- Associate in Arts and Associate in Science degrees can be used to obtain necessary skills for a range of possible careers, or they may be used to transfer to a four-year institution.
- Associate in Arts/Associate in Science for Transfer degrees (AA-T, AS-T). Students will earn an associate degree as well as being transfer-ready.
- Certificates of Achievement are awarded to students who complete formal instructional programs of at least 18 units designed to prepare them for a specific field or endeavor.
- Job Skills Certificates are awarded upon the satisfactory completion of coursework (less than 18 units) in a specific area of study.

Students who plan to seek immediate employment rather than to transfer usually choose to meet the Bakersfield College General Education Requirements.

Graduation with an Associate Degree
The awarding of an associate degree is intended to represent more than an accumulation of units. It symbolizes a successful attempt on the part of the college to lead students through patterns of learning experiences designed to develop certain capabilities and insights: the ability to think and to communicate clearly and effectively both orally and in writing; to solve problems and to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capability for self-understanding. In addition to these accomplishments, the student shall possess sufficient depth in some field of knowledge to contribute to lifetime interest. (Title 5)

The associate degree shall be conferred by the Board of Trustees of the Kern Community College District upon a Bakersfield College student who has satisfactorily completed the requirements. These requirements are consistent with those prescribed by the Board of Governors of the California Community Colleges and the Board of Trustees of the Kern Community College District.

Associate in Arts/Sciences Degrees for Transfer (AA-T/AS-T)
California Community Colleges are now offering associate degrees for transfer to the California State University. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a California State University major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the California State University system and given priority admission consideration to their local California State University campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

To view the most current list of Bakersfield College Associate Degrees for Transfer and to find out which California State University campuses accept each degree, please visit the A Degree with a Guarantee website at www.adegreewithaguarantee.com. Current and prospective community college students should meet with an advisor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

Graduation
Completing Degrees, Certificates and Transfer at BC
Graduation from Bakersfield College is not automatic. You must fill out a Candidacy for Graduation form and a degree analysis with a counselor or advisor. Petition to graduate even if you are only completing transfer coursework. Some transfer students may be eligible to receive a Liberal Arts Associate degree. You should petition to graduate during your last semester at Bakersfield College by these dates:

<table>
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<tr>
<th>Semester</th>
<th>Application Period Begins</th>
<th>Deadline to Submit Application</th>
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<tr>
<td>Spring 2018</td>
<td>August 1</td>
<td>October 15</td>
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<tr>
<td>Summer 2018</td>
<td>October 15</td>
<td>April 1</td>
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<tr>
<td>Fall 2018</td>
<td>April 1</td>
<td>July 1</td>
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</table>

It is recommended that students apply early in the academic year as a response will be sent from the Office of Admissions and Records to the student’s address which will detail the progress and any courses that may still be needed to complete degree requirements. Students are encouraged to meet with their counselor if there are questions about academic program requirements. Transcripts from Other Colleges

All official college transcripts or other appropriate verifying documents must be on file with Bakersfield College in order for the Office of Admissions and Records to review applications and determine eligibility.

The Office of Admissions and Records notifies students who do not qualify. Students who do not receive such notification should assume that they will graduate if they satisfactorily complete their current term coursework.

Students who qualify will receive their diploma in the mail approximately eight weeks after the end of the semester.

Commencement Ceremonies
Commencement ceremonies are held once each year in May. Students who complete their degree requirements during the fall, summer, or spring prior to the ceremony or who will complete them in the following summer are eligible to participate. Students planning to complete during the following summer must:
- file a candidacy request between April 7 and May 1
- need only one course or less than five units for completion
- submit documentation of registration for the required course(s)

General Requirements
1. Educational Planning: Completion of a designated course and a student education plan within the first 15 units at Bakersfield College. Choose from the following:
• Agriculture: AGRI B1  
• Allied Health: NURS B100  
• Applied Science and Technology: INDT B10 FACE: FDSV B50  
• Physical Education: PHED B1A  
• Physical Science: ARCH B1; ENGR B47  
• Student Development: STDV B1, B2, B3, B6

2. Minimum of 60 degree applicable units, with at least a 2.0 grade point average.  
3. At least 12 of the 60 units must be completed with Bakersfield College.  
4. Completion of the required courses with a minimum grade of ‘C’ of a designated major.  
5. Competency Requirements:  
   • Composition: completion of English B1A with a minimum grade of ‘C.’  
   • Mathematics: Two years of high school algebra or MATH B70 with a minimum grade of ‘C’; or an equivalent score on the Placement/Assessment.  
   • Reading: a satisfactory score on the Bakersfield College Placement/Assessment or a satisfactory grade in ACDV B50.  
6. Completion of a General Education Pattern: Choose 1: Bakersfield College General Education Specific Requirements, or California State University General Education Breadth, or Intersegmental General Education Transfer Curriculum (IGETC). (See General Education Requirements)  
7. Completion of one course with a minimum grade of ‘C’ meeting the Multicultural Requirement

Multicultural Requirement  
Multicultural study promotes awareness of and sensitivity to diverse beliefs and practices in contemporary society. Bakersfield College requires students to take courses that are inclusive of multicultural perspectives found in American and global society. This requirement may be satisfied through studying the distinctive cultures of the United States or the world, including but not limited to ethnicity, gender, class, political systems, religions, or human geography.

American Cultural and Ethnic Groups  
This requirement includes courses that lead to an understanding of ethnic groups and cultures in American society. Courses will focus on themes that address the theoretical or analytical issues relevant to understanding race, culture, and ethnicity. This exploration can be accomplished through the study of, but not limited to: African Americans, Native Americans, Asian Americans, Chicanos/ Latino Americans, and European Americans from integrative and comparative viewpoints as they relate to the larger context of American history, society, and culture.

World Cultures  
Students may develop a multicultural perspective through a study of world cultures and their relationship to America in a global society. The study of the history, society, or culture of a foreign country and its relationship to America can demonstrate the interdependence of all nations in a global political, economic and social infrastructure.

Courses meeting this requirement should not be based solely on Western Civilization.

Multiple Degrees  
An associate in arts or associate in science degree will be awarded to those already possessing an associate or higher degree if:  
1. All requirements in a different major from that of previous associate or higher degree are satisfied; and  
2. All general education requirements in effect when beginning the new degree program are satisfied; and  
3. The student is enrolled at Bakersfield College during the semester in which the degree requirements are completed.

General Education  
The General Education Program at Bakersfield College includes those courses required of all students, regardless of major or career goals, for the associate degree or for transfer to some four-year institutions. The program is intended to be more than a requirement; it can be an exciting, dynamic, and essential part of a student’s education.

The General Education Program has been designed to address the needs of men and women of all ages, abilities, ethnic identities, life styles, and goals. Through general education, the college seeks to foster knowledge, skills, and attitudes that will empower students to shape the direction of their lives and their environment. Its goal is to encourage students to strive for the highest quality of life, both at leisure and at work, for themselves, their families, and the larger community.

Recognizing the certainty of change, the college, through the General Education Program, hopes to prepare students to meet the challenges of the twenty-first century. Specifically, the program will assist them to develop and acquire the following:

• Global Consciousness: an awareness of the complexity and diversity of the world, with its interplay of environmental, social, cultural, political, and economic forces, and an understanding of the unique role that each person plays in the system of relationships which extends from family to the international community.  
• Communication Skills: the ability to convey ideas, values, feelings, and knowledge accurately and effectively through written, oral, aesthetic, and technological media across personal, cultural, and national boundaries.  
• Adaptability: the willingness and confidence to accept and respond creatively to change, and the ability to analyze, think critically, solve problems, and resolve personal and interpersonal conflicts.  
• Responsibility: A respect for ethics, citizenship, and leadership, and a commitment to personal health and emotional growth which enable one to participate in life rather than react to it.  
• Knowledge: the body of information, reflecting both quantitative and qualitative reasoning, in the arts, sciences, and technology, their modes of inquiry and expression, their interrelationships, and the methods of accessing information in all areas of study.

The general education program thus seeks to assist students to succeed in the present and to inspire them to approach the future with a commitment to life-long learning.

Because certain basic competencies are necessary for an educated person, the General Education Program specifically requires competency testing (or course alternatives) in reading, written expression, and mathematics.
Institutional Level Learning Outcomes

Upon completion of an associate degree, a student will:

I. Pursue knowledge and evaluate its consequences
   A. Think critically, abstractly, logically, and algorithmically to evaluate and solve problems.
   B. Integrate new information to formulate principles and theories and display openness to different opinions.
   C. Share the desire for intellectual creativity and acquisition of knowledge.

II. Communicate clearly and effectively in both written and oral forms

III. Demonstrate knowledge and abilities in a chosen area of study
   A. Demonstrate an understanding of resources and procedures of a field and the ability to use them.
   B. Demonstrate the ability to use current technology to acquire, organize, and analyze information appropriately.
   C. Possess a core of knowledge and skills in a chosen field.

IV. Appreciate civic responsibilities
   A. Reflect upon the cultural and ethical dimensions of life.
   B. Contribute to society as an actively engaged citizen.

General Education Student Learning Outcomes

A.1. Oral Communication
   1. Form and present informative persuasive messages.
   2. Demonstrate competence in both active and emphatic listening.
   3. Present oral messages to appropriate audiences and adhere to conventions of message delivery.
   4. Manage personal communication apprehension and anxiety.

A.2. Written Communication
   1. Identify the controlling idea and the main points of college-level expository and argumentative essays.
   2. Evaluate expository and argumentative essays through the application of critical thinking techniques.
   3. Write logical and coherent expository and argumentative essays, summaries, and paraphrases using correctly the standard conventions of written English.

B.1. Natural Sciences
   1. Demonstrate a knowledge of natural phenomena and recognize the processes that explain them.
   2. Demonstrate a knowledge of scientific methodologies when solving a problem.

B.2. Mathematics and Logic (Analytic Thinking)
   1. Apply formal systems of reasoning in solving problems or analyzing arguments.
C.1. Introduction to the Arts
   1. Demonstrate an understanding of and an ability to describe the ways in which arts, literature, philosophy or foreign languages reflect historical, intellectual, and cultural contexts, as well as aesthetic tastes.
   2. Demonstrate the ability to recognize, describe and/or produce various components of an art form or language either visually and/or auditorily.

C.2. Introduction to the Humanities
   1. Demonstrate an understanding of and an ability to describe the ways in which arts, literature, philosophy or foreign languages reflect historical, intellectual, and cultural contexts, as well as aesthetic tastes.

D.1. Foundations in the Behavioral Sciences
   1. Demonstrate an understanding of the perspectives, theories, methods, and core concepts of the behavioral sciences.
   2. Explain the major problems and issues in the disciplines in their contemporary, historical, and geographical contexts.
   3. Demonstrate an understanding of and an ability to describe the contributions and perspectives of women, ethnic and other minorities, and Western and non-Western peoples.

D.2. Foundations in the Social Sciences
   1. Demonstrate an understanding of the perspectives, theories, methods, and core concepts of the social sciences.
   2. Explain the major problems and issues in the disciplines in their contemporary, historical, and geographical contexts.
   3. Demonstrate an understanding of and an ability to describe the contributions and perspectives of women, ethnic and other minorities, and Western and non-Western peoples.

D.3. American (U.S.) Institutions
   1. Demonstrate an understanding of the perspectives, theories, methods, and core concepts of the social sciences.
   2. Explain the major problems and issues in the disciplines in their contemporary, historical, and geographical contexts.
   3. Demonstrate an understanding of and an ability to describe the contributions and perspectives of women, ethnic and other minorities, and Western and non-Western peoples.

E. Lifelong Understanding and Self-Development
   1. Critically examine the development of the individual as an integrated physiological, psychological, spiritual, and social being.
   2. Identify, describe and explain the interactions of the internal and external influences and effects in human development and behavior over the course of the human life span.

Bakersfield College General Education Pattern
A. Communication in the English Language and Critical Thinking (6 units)
   Courses in language and rationality are those which develop the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation and communication. Take 3 units in A.1 and 3 units in A.2.

A.1. Oral Communication (3 units)
   - COMM B1, B4, B8

A.2. Written Communication (3 units)
   - ENGL B1A, B2, B3

B. Physical Universe and Life Forms (6 units)
   Courses in the natural sciences are those that examine the physical universe, its life forms, and its natural phenomena. Further, courses in the natural sciences help develop an appreciation and understanding of the scientific method. Courses in the natural sciences, math and logic help students apply logical, qualitative and quantitative reasoning in solving problems or analyzing arguments. Take 3 units in B.1 and 3 units in B.2.

B.1. Natural Sciences (3 units)
   Life Sciences:
   - ANSC B1
   - ANTH B1
   - BIOL B3A, B11, B16, B18, B32, B33
   - CRPS B1, B10
   - FORE B2
   - PSYC B1B
   - SOIL B1
   Physical Sciences:
   - ASTR B1, B2, B3
   - CHEM B1A, B2A, B11, B18
   - ERSC B10; B10L
   - GEOG B1, B1L, B3
   - GEOL B10, B10L, B11, B11L
   - PHSC B12
   - PHYS B2A, B4A

B.2. Mathematics and Logic Analytical Thinking (3 units)
   - COMM B5
   - MATH B1A, B1B, B2, B4A, B6A, B6B, B6C, B22, B23, B70
   - PHIL B7, B9
   - PSYC B5, B6

C. Arts, Literature, Philosophy and Foreign Language (3 units)
   Courses in the Arts, Literature, Philosophy and Foreign Language are those which study the cultural activities and artistic expressions of human beings. The courses help develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them. Art and language study may consist of historical or stylistic survey courses, courses involving speaking ( signing) and understanding a language, hands-on creation or re-creation of examples of visual or performing arts, and/or courses which develop specific skills necessary for engaging in visual or performing arts.
C.1. Arts
- ART B1, B2, B4, B5, B10, B16, B17, B20, B24, B35, B36, B37*
- ORNH B36
- SPAN B1

C.2. Humanities
- ASL B1, B2, B3, B4, B7
- COMM B21
- ENGL B1B, B5A, B5B, B10, B20A*, B21*, B24, B27, B38, B30A, B30B, B33
- JAPN B1, B2, B3
- PHIL B6a, B10, B12, B18, B37*
- SPAN B1, B2, B3, B4, B35

D. Social, Political, Legal and Economic Institution and Behavior, Historical Background (9 units for AA; 6 units for AS)
Courses in the social and behavioral sciences are those which focus on people as individuals and as members of society. The courses will help develop an understanding of the methods of inquiry used by the social and behavioral sciences. For an Associate in Arts degree, choose six units from D.1 and/or D.2 and 3 units from D.3. For an Associate in Science degree, take 3 units from either D.1 or D.2 and three units from D.3.

D.1. Foundations in the Behavioral Sciences
- CHDV B21
- COMM B6*
- PSYC B1A, B20 (SOCI B20), B33, B40
- SOCI B20 (PSYC B20)

D.2. Foundation in the Social Sciences
- AGRI B1
- AGBS B2
- ANTH B2*, B3, B5*
- BSAD B20
- COMM B7
- CRIM B1, B5
- ECON B1, B2
- GEOG B2*
- JRNL B1*
- POLS B1*, B2*, B3*, B12*, B16
- PSYC B20 (SOCI B20)
- SOCI B1*, B2, B20 (PSYC B20), B28*, B36*, B45*

D.3. American (U.S. Institutions)
- HIST B17A*, B17B*, B18*, B20A*, B30B*, B36*
- POLS B1*, B12*

E. Lifelong Understanding and Self-Development (4 units)
Courses in this area will prepare students for lifelong integrated physiological and psychological development. Take 3 units from one of the following courses:
- COMM B2
- HLED B1
- NUTR B10
- MEDS B35, or completion of an approved Allied Health Program
- PHED B36
- PSYC B1A, B30, B33
- STDV B6

No more than one unit of activity/skills course work may be used to satisfy the Area E requirement. Take 1 unit from the following PHED courses:

*COURSE satisfies the Multicultural Requirement.

Multicultural Requirement
Bakersfield College requires students to take courses that are inclusive of multicultural perspectives found in American and global society. This requirement may be satisfied through studying either American ethnic groups or world cultures.

Note: Students must complete at least one class identified with an (*) to satisfy the Multicultural Requirement for graduation.

The following courses satisfy both a Bakersfield College General Education category and the Multicultural Requirement:
- ANTH B2, B5
- ART B37
- COMM B6
- ENGL B20A, B21
- GEOG B2
- JRNL B1*
- MUSC B24
- PHIL B37
- POLS B1, B2, B3, B12
- SOCI B1, B28, B36, B45

The following non-general education courses also satisfy the Multicultural Requirement:
- ASL B6
- CHDV B32

Pursuant to SB 1393, a student of a registered nursing program with a baccalaureate degree from a regionally accredited institution is not required to complete any coursework other than that which is unique and exclusively required to earn a nursing degree from that institution. All course work must meet the graduation requirements and licensure eligibility requirements as set forth by the Board of Registered Nursing.
# Bakersfield College Programs of Study

Bakersfield College currently offers a Bachelor's Degree in Industrial Automation, 29 Transfer Degrees, 37 Associate Degrees, 44 Certificates of Achievement and 26 Job Skill Certificates in diverse fields of studies relevant to our employment and transfer needs. This table represents the current list of degrees and certificates available.

Greater detail is available in the Program Portion of the catalog.

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<td>Auto Tune-Up and Emissions X</td>
<td>Child Dev. Master Teacher-Infant-Toddler X</td>
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<td>Communication Studies X</td>
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<td>Engine Performance X</td>
<td>Computer Studies X</td>
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<td>Wildland Fire Technology</td>
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<td>Mathematics</td>
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<td>Music</td>
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<td>Pre-Law</td>
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<td>Culinary Arts</td>
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<td>LVN to Associate Degree Nursing Program</td>
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<td>Foodservice Management Option</td>
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<td>LVN to non-Degree Nursing (30 unit option)</td>
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<td>Vocational Nursing (LVN)</td>
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<td>Nurse Assistant (CAN)</td>
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<td>Geology</td>
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<td>Paramedic Program</td>
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<td>History</td>
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<td>Physics</td>
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<td>Philosophy</td>
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<td>Political Science</td>
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<td>Industrial Technology: Industrial Drawing</td>
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<td>Psychology</td>
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<td>Radiologic Technology</td>
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<td>Industrial Technology (General)</td>
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<td>Industrial Technology: Construction</td>
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<td>Industrial Technology: Electronics</td>
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<td>Industrial Technology: Industrial Drawing</td>
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<td>Industrial Technology: Welding</td>
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<td>Ind. Tech: Woodworking &amp; Cabinetmaking</td>
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</tbody>
</table>
Administration of Justice

Degree
Administration of Justice, Associate of Science
Degree for Transfer
The Associate of Science in Administration of Justice for Transfer degree (AS-T in Administration of Justice) is intended to prepare students to transfer to CSU campuses that offer bachelor’s degrees in Administration of Justice or Criminal Justice. Students who complete this degree will receive “priority admission with junior status to the California State University system”. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18-20 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of ‘C’ or better in all major coursework. A ‘P’ (Pass) grade is not acceptable for courses in the major. There are no additional graduation requirements. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:

- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Total Units: 18-19

Required Core Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B1</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B2</td>
<td>Criminal Law</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A - Select two classes from the following (6 units):
- CRIM B3 - Introduction to Evidence 3.0
- CRIM B4 - Constitutional Criminal Procedure 3.0
- CRIM B5 - Community Relations 3.0
- CRIM B8 - Criminal Investigation 3.0
- CRIM B9 - The Juvenile Justice System 3.0
- CRIM B12 - Forensic and Scientific Aspects of Evidence Administration 3.0

List B - Select two classes from the following (6-7 units):
- PSYC B5 - Elementary Statistics for the Behavioral and Social Sciences 4.0
- PSYC B1A - General Psychology 3.0
- SOCI B1 - Introduction to Sociology 3.0

PSYC B5 has been changed from 5 units to 4 units. This changes the required units from 18-20 to 18-19.

Program Learning Outcomes
Upon successful completion, the student will:
- be able to identify, analyze, and apply the fundamental theories and concepts underlying the American Criminal Justice system.
- be able to identify and describe the operational elements of the major components comprising the American Justice system.
- be able to identify, analyze, and apply basic legal principles and rules to factual situations.
- be able to identify and implement the principles and procedures utilized in legitimate scientific and criminal investigation.
- be able to demonstrate multicultural awareness and respect for constitutional and human rights.
- be able to identify, analyze, and apply the ethical components of discretionary decision-making in the three major components of the criminal justice system: police, courts, and corrections.
- be able to demonstrate respect for the dignity and humanity of victims, perpetrators, and wrongfully convicted persons.
Agriculture

**Degrees**
- Animal Science, Associate in Science Degree for Transfer
- Animal Science, Associate of Science Degree
- Business Management, Associate of Science Degree for Transfer
- Plant Science, Associate of Science Degree for Transfer
- Plant Science - Horticulture Emphasis, Associate of Science Degree
- Plant Science - Crops Emphasis, Associate of Science Degree
- Environmental Horticulture, Associate of Science Degree
- Forestry, Associate of Science Degree
- Forestry, Associate of Arts Degree

**Certificates**
- Animal Science, Certificate of Achievement
- Business Management, Certificate of Achievement
- Plant Science, Certificate of Achievement
- Environmental Horticulture, Certificate of Achievement
- Forestry, Certificate of Achievement
- Registered Veterinary Technician, Job Skills Certificate
Agriculture - Animal Science
Associate in Science Degree for Transfer

The Associate in Science in Agriculture Animal Science for Transfer is designed to provide students a clear pathway to the CSU Animal Science major and completion of the Animal Science baccalaureate degree. The Animal Science major prepares students for occupations in those areas of agriculture involving production, managing, and marketing of livestock. Both the scientific and practical aspects of the production of horse, beef, sheep, swine, dairy cattle and companion animals are stressed in the courses.

Program Learning Outcomes
Upon successful completion, the student will:
- Demonstrate artificial insemination procedures, proper record keeping in the field of animal science, and skills in day to day animal production such as proper care, feeding, and reproduction.
- Practice the proper basic principles of animal safety, evaluate performance such as growth and feed conservation.
- Demonstrate specific skills in animal science such as production, genetics, and nutrition within the animal science discipline needed for employment.
- Identify conformation qualities in cattle, sheep, swine, and dairy cattle.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

<table>
<thead>
<tr>
<th>Total Units: 20-21</th>
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<tbody>
<tr>
<td><strong>Required Courses - 14 units</strong></td>
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<tr>
<td>Course #</td>
</tr>
<tr>
<td>CHEM B2A</td>
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<tr>
<td>AGBS B2</td>
</tr>
<tr>
<td>ANSC B1</td>
</tr>
<tr>
<td>MATH B22</td>
</tr>
</tbody>
</table>

**List A: Select one from each area**

**Area 1: Animal Production (3 units)**
- ANSC B2 Beef Production 3.0
- ANSC B4 Dairy Production 3.0
- ANSC B5 Swine Production 3.0
- ANSC B10 Horse Production 3.0

**Area 2: Animal Health (3 -5 units)**
- ANSC B6 Applied Animal Nutrition 4.0
- ANSC B7 Animal Diseases 3.0

**List B: Select (0-8) units.**
- ANSC B3 Sheep Production 3.0
- BSAD B1 Financial Accounting 4.0
- CRPS B5 Plant Science 3.0

<table>
<thead>
<tr>
<th>Category</th>
<th>CSU</th>
<th>IGETC</th>
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<tbody>
<tr>
<td>Units in Major</td>
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<td>20-21</td>
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</tr>
<tr>
<td>Electives (CSU Transferrable)</td>
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<td>10-11</td>
</tr>
<tr>
<td>Degree Total</td>
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<td>60</td>
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</tbody>
</table>
Agriculture - Animal Science
Associate of Science Degree

The Animal Science major prepares students for occupations in those areas of agriculture that involve livestock production and related agribusinesses. Both the scientific and practical aspects of the production of horse, beef, sheep, swine, dairy cattle, poultry, and companion animals are the focus of courses.

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate AI procedures, proper record keeping in the field of animal science, and skills in day to day animal production such as proper care, feeding, and reproduction.
- be able to practice proper basic principles of animal safety, evaluate performance such as growth and feed conservation.
- demonstrate specific skills in animal science such as production, genetics, and nutrition within the animal science discipline needed for employment.
- identify conformation qualities in cattle, sheep, and swine.

Total Units: 26
Required Courses
Course # Name Units
AGBS B2 Agricultural Economics 3.0
AGRI B1 Agriculture, Environment and Society 3.0
ANSC B1 Introduction to Animal Science 3.0
WEXP B248 Occupational Work Experience Education 3.0
AGRI B49 Agriculture Leadership Training 2.0

Select 6 units from the following
ANSC B2 Beef Production 3.0
ANSC B3 Sheep Production 3.0
ANSC B4 Dairy Production 3.0
ANSC B10 Horse Production 3.0
ANSC B5 Swine Production 3.0

Select 6 units from the following
ANSC B6 Applied Animal Nutrition 4.0
ANSC B7 Animal Diseases 3.0
ANSC B11 Livestock Selection & Evaluation 3.0

Agriculture - Animal Science
Certificate of Achievement

Animal Science Certificate of Achievement prepares students for entry level employment in food animal production and animal management and care. This program prepares students for careers in Animal Science and entry level production jobs such as feed mill technician, beef technician, swine technician, poultry technician, animal groomer, small animal assistant technician, and pet store employee.

Program Learning Outcomes
Upon successful completion, the student will:
- identify and implement sustainable livestock management practices that will improve livestock quality, provide efficacious management, protect the natural resources, and ensure economic viability of the livestock industry.
- demonstrate specific skills in animal science such as production, genetics, and nutrition within the animal science discipline needed for employment.
- demonstrate a working knowledge of animal production life cycles to develop a ranch management calendar that incorporates scientifically based management decisions and the latest technological advances in livestock husbandry.
- identify and evaluate livestock anatomy and physiology and relate form to function.

Total Units: 33
Required Courses
Course # Name Units
AGRI B1 Agriculture, Environment and Society 3.0
ANSC B1 Introduction to Animal Science 3.0
AGRI B49 Agriculture Leadership Training 2.0

Select 22 units from the following
ANSC B2 Beef Production 3.0
ANSC B3 Sheep Production 3.0
ANSC B4 Dairy Production 3.0
ANSC B6 Applied Animal Nutrition 4.0
ANSC B7 Animal Diseases 3.0
ANSC B10 Horse Production 3.0
ANSC B11 Livestock Selection and Evaluation 3.0
ANSC B22 Animals and Society 3.0
ANSC B83 Introduction to Veterinary Technology 4.0
ANSC B10 Horse Production 3.0
ANSC B6 Applied Animal Nutrition 4.0

Select 3 units from the following
ANSC B11 Livestock Selection and Evaluation 3.0
CRPS B2 Forage Crops 3.0
NRES B1 Range Management 3.0
Agriculture Business

Associate of Science Degree for Transfer

The Associate in Science in Agriculture Business for Transfer degree is designed to provide students a clear transfer pathway to the CSU agriculture business major and completion of the agriculture business baccalaureate degree, to grant guaranteed admission to a CSU to a similar major with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

The Associate in Science in Agriculture Business for Transfer degree provides a study of key Agribusiness concepts. Careers in agriculture such as farm management, accounting, marketing of agricultural products, sales, and services require training in business courses such as accounting, computers and salesmanship. Agriculture Business majors will be able to apply the concepts, principles, and terminology of business (economics, management, finance, marketing, and others) to real-world issues and opportunities in the agricultural and life sciences industries.

Program Learning Outcomes
Upon successful completion, the student will:
• Demonstrate the ability to explain microeconomic and macroeconomic concepts, analyze and evaluate agribusiness problems and management decisions, and perform basic algebra and introductory calculus operations in the context of applied economic analysis and optimization.
• Demonstrate skills in fundamental agribusiness principles and analysis techniques into logical decision-making constructs.
• Develop strong communication skills, both oral and written, for the purpose of conveying the results of business analyses in a clear, persuasive, and informative manner.
• Apply the concepts, principles, and terminology of business (economics, management, finance, marketing, and others) to real-world issues and opportunities in the agricultural and life sciences industries.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including the following:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.
• The obtaining of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Total Units: 22

Required Courses

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<th>Course #</th>
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<th>Units</th>
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<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
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<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
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<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
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Choose 9 units from the following

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<th>Course</th>
<th>Name</th>
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<td>AGBS B3</td>
<td>Introduction to Agriculture Business</td>
<td>3.0</td>
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<tr>
<td>CRPS B5</td>
<td>Plant Science</td>
<td>3.0</td>
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<tr>
<td>AGBS B6</td>
<td>Agriculture Sales and Communication</td>
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Choose 3 units from the following

<table>
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<tbody>
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<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
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Category

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<tr>
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<tr>
<td>Degree Total</td>
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</table>
Agriculture Business Management
Certificate of Achievement

The Certificate of Achievement in Agriculture Business Management is intended for those students who plan to enter the workforce.

The Agriculture Business Management major is made up of agriculture and agricultural business courses pertaining to the industry. Many jobs in agriculture require training in business courses such as accounting, computers and salesmanship. Career opportunities include farm management, marketing of agricultural products, sales and services.

Program Learning Outcomes
Upon successful completion, the student will:
• understand economic concepts and quantitative methods.
• demonstrate critical, integrative, and evaluative thinking.
• have well-developed verbal and written communication skills that are necessary for efficient and clear dissemination of economic analysis, as well as for success in private and public sector careers.
• understand and interpret economic news and trends using economic theory and apply them to agricultural operations for employment that will enhance opportunities and success in agriculture business in the 21st century.

Career Opportunities:
Field Representative: $35,000 - 45,000, Sales Assistant: $30,000 - 40,000 (possible commission options), Marketing Assistant: $30,000-40,000, Business Development Assistant: $40,000-50,000, Warehouse Supervisor: $30,000-40,000, Procurement Assistant: $30,000 - $40,000

Total Units: 26

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
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<tr>
<td>AGBS B6</td>
<td>Agricultural Sales and Communication</td>
<td>3.0</td>
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<tr>
<td>WEXP B248</td>
<td>Occupational Work Experience Education</td>
<td>3.0</td>
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<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
<td>2.0</td>
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Select 3 units from the following

- AGBS B2 Agricultural Economics 3.0
- SOIL B1 Introduction to Soil Science 3.0
- CRPS B1 Principles of Crop Production 3.0
- COMP B5 Introduction to Microsoft Office 3.0
- COMP B2 Introduction to Computer Information Systems 3.0
- CRPS B2 Forage Crops 3.0
- NRES B1 Range Management 3.0
- ANSC B1 Introduction to Animal Science 3.0
- ANSC B2 Beef Production 3.0
- ANSC B4 Dairy Production 3.0
- ANSC B10 Horse Production 3.0
- FORE B2 Natural Resources 3.0
- FORE B1 Introduction to Forestry 3.0
- FORE B3 Wildlife Management 3.0
- FORE B5 Identification of California Wildlife 3.0
- FORE B6 Forestry Skills 3.0
The Associate in Science in Agriculture Plant Science degree for Transfer is designed to provide students a clear pathway to the CSU agriculture plant science major and completion of the agriculture plant science baccalaureate degree, to grant guaranteed admission to a CSU to a similar major, with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

This program is designed for the plant science student who is interested in transferring to a CSU after graduation. The student may emphasize either the horticultural or crop production aspects of plant science including studies of soils, plant propagation, plant identification, plant pest control, and irrigation.

To Transfer Coursework:
A minimum of 18 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Bachelor of Science Degree Names:

Program Learning Outcomes
Upon successful completion, the student will:
- identify and utilize pertinent concepts of plant physiology, anatomy, nutrition, reproduction, and pest control to solve plant production problems under field, greenhouse, or landscape conditions.
- identify and utilize pertinent concepts of soil physical, chemical, and biological properties and their interactions with plants to solve plant production problems under field, greenhouse, or landscape conditions.
- identify and utilize pertinent concepts of plant propagation to effectively reproduce plants from seed, stems, leaves, roots, natural propagules, and/or small amounts of tissue in culture and to produce grafted plants.

Career Opportunities:
Ag Business Consultant, Arborist, Botanist/Plant Biologist, Floriculturist / Flower Grower, Floral Designer / Florist, Forester, Greenhouse Grower / Manager, Landscape Designer or Garden Consultant, Sports Turf Superintendent, Tree Technician, Urban Forester, Farm Managers.

Total Units: 26

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM B2A</td>
<td>Introductory to General Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>4.0</td>
</tr>
<tr>
<td>CRPS B5</td>
<td>Introduction to Plant Science</td>
<td>3.0</td>
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<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B6</td>
<td>Ornamental Plant Identification-Ground Covers, Vines, and Dwarf Shrubs</td>
<td>3.0</td>
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<tr>
<td>ORNH B7</td>
<td>Ornamental Plant Identification-Large Shrubs, Small Trees, Large Trees, and Palms</td>
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<td>MCAG B10</td>
<td>Farm Power Operations</td>
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List A - Select 3 units from the following

List B - Select 6 units from the following

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRPS B2</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B4</td>
<td>Vegetable Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B3</td>
<td>Landscape Installation and Maintenance</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Agriculture - Plant Science - Horticulture Emphasis
Associate of Science Degree

This program provides instruction in the planting, growing, harvesting, and marketing of field, forage, and vegetable crops as well as irrigated and range pasture crops. Environmental Horticulture focuses on the science and art concerned with landscape design and installation, floral arts, urban forestry, the urban environment, culture, marketing, and utilization of high value, intensively cultivated flowers, fruits, vegetables, ornamental plants and trees. Career opportunities in Crop Science include farm management, agricultural pest control, fertilizer sales and application, soil laboratory technician, irrigation equipment supply and sales, and agricultural research technician.

The Plant Science AS with a Horticulture emphasis has multiple pathways for BC Gen Ed, CSU and IGETC.

To Transfer Coursework:
A minimum of 28 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Bachelors of Science Degree Names:

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate managerial and leadership abilities in plant science classes for employment that will enhance opportunities and success in the plant science industry in the 21st century.
• master academic proficiency and demonstrate specific skills within plant science disciplines needed for employment within the industry.
• master skills needed for baccalaureate level education or obtain a certificate

Career Opportunities:
Environmental Horticulture career earnings will range from $25,000 to $85,000 / yr. - Ag Business Consultant, Arborist, Botanist/Plant Biologist, Christmas tree farmer, Floriculturist / Flower Grower, Floral Designer / Florist, Forester, Greenhouse Grower / Manager, Landscape Designer or Garden Consultant, Sports Turf Superintendent, Tree Technician, Urban Forester, Horticultural Writer.

To Achieve the Associate in Science of Plant Science - Horticulture Emphasis: Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Plant Science Associate in Science.

Total Units: 36

Required Courses
Course #   Name                                      Units
AGBS B2   Agricultural Economics                     3.0
AGRI B1   Agriculture, Environment and Society       3.0
ORNH B1   Introduction to Ornamental Horticulture    3.0
ORNH B4   Plant Propagation                          3.0
ORNH B7   Ornamental Plant Identification- Large Shrubs, Small Trees, Large Trees, and Palms 3.0
ORNH B8   Introduction to Landscape Design           3.0
CRPS B5   Plant Science                              3.0
CRPS B3   Integrated Pest Management                 3.0
SOIL B1   Introduction to Soil Science               3.0

Select nine units from the following
ORNH B2   Fundamentals of Nursery Management and Plant Production 3.0
ORNH B3   Landscape Installation and Maintenance      3.0
ORNH B6   Ornamental Plant Identification- Ground Covers, Vines, and Dwarf Shrubs 3.0
ORNH B36  Beginning Floral Design                     3.0
Agriculture - Plant Science - Crops Emphasis
Associate of Science Degree

This program provides instruction in the planting, growing, harvesting, and marketing of field, forage, and vegetable crops as well as irrigated and range pasture crops.

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate managerial and leadership abilities in plant science classes for employment that will enhance opportunities and success in the plant science industry in the 21st century.
- master academic proficiency and demonstrate specific skills within plant science disciplines needed for employment within the industry.
- master skills needed for baccalaureate level education or obtain a certificate.

Career Opportunities:
Farm management, agricultural pest control, Ag chemical sales and application, agricultural laboratory technician, irrigation equipment supply and sales, and agricultural research technician.

Total Units: 27
Required Courses
<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B5</td>
<td>Plant Science</td>
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</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B2</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B4</td>
<td>Vegetable Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Agriculture - Plant Science Certificate of Achievement

This program provides instruction in the planting, growing, harvesting, and marketing of field, forage, and vegetable crops as well as irrigated and range pasture crops.

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate managerial and leadership abilities in plant science classes for employment that will enhance opportunities and success in the plant science industry in the 21st century.
- master academic proficiency and demonstrate specific skills within plant science disciplines needed for employment within the industry.

Career Opportunities:
Farmers, Ranchers, and Other Agricultural Managers, Natural Sciences Managers, Agricultural Technicians, Environmental Science and Protection Technicians, Pesticide Handlers, Sprayers, and Applicators, Vegetation, First-Line Supervisors of Farm Workers, Agricultural Inspectors, Forest and Conservation Workers

Total Units: 24
Required Courses
<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B1</td>
<td>Principles of Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B5</td>
<td>Plant Science</td>
<td>3.0</td>
</tr>
<tr>
<td>NRES B1</td>
<td>Range Management</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>CRPS B2</td>
<td>Forage Crops</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B4</td>
<td>Vegetable Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>
# Environmental Horticulture

## Associate of Science Degree

The Environmental Horticulture Associate in Science degree is designed for the student desiring to enter the workforce after earning a two-year degree. Environmental Horticulture focuses on the science and art concerned with landscape design and installation, floral arts, urban forestry, the urban environment, culture, marketing, and utilization of high value, intensively cultivated flowers, fruits, vegetables, ornamental plants and trees.

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Environmental Horticulture Associate in Science.

Bachelors of Science Degree Names:

### Program Learning Outcomes

Upon successful completion, the student will:
- demonstrate managerial and leadership abilities in environmental horticulture classes for employment that will enhance opportunities and success in the horticulture industry in the 21st century.
- master academic proficiency and demonstrate specific skills within environmental horticulture disciplines needed for employment.
- master skills needed for baccalaureate level education or obtain a certificate.

### Career Opportunities:

Arborist, Floral Designer or Florist, Greenhouse Grower, Irrigation Specialist, Landscape Architect, Landscape Contractor, Pest Control Advisor, Plant Breeder, Sports Turf Superintendent, Urban Forester and more.

### Total Units: 33

#### Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORNH B1</td>
<td>Introduction to Ornamental Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B2</td>
<td>Fundamentals of Nursery Management and Plant Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B3</td>
<td>Landscape Installation and Maintenance</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B4</td>
<td>Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B6</td>
<td>Ornamental Plant Identification: Ground Covers, Vines, and Dwarf Shrubs</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B7</td>
<td>Ornamental Plant Identification: Large Shrubs, Small Trees, Large Trees &amp; Palms</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B8</td>
<td>Introduction to Landscape Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ORNH B36</td>
<td>Beginning Floral Design</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B5</td>
<td>Plant Science</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Environmental Horticulture
Certificate of Achievement

The Environmental Horticulture Certificate of Achievement is designed for the student desiring specialized training in order to enter the workforce in the least amount of time. Environmental Horticulture focuses on the science and art concerned with landscape design and installation, floral arts, urban forestry, the urban environment, culture, marketing, and utilization of high value, intensively cultivated flowers, fruits, vegetables, ornamental plants and trees.

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Environmental Horticulture Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate managerial and leadership abilities in environmental horticulture classes for employment that will enhance opportunities and success in the horticulture industry in the 21st century.
• master academic proficiency and demonstrate specific skills within environmental horticulture disciplines needed for employment.
• be able to identify regional trees and plants and their use in the landscape.

Career Opportunities:
Arborist, Floral Designer or Florist, Greenhouse Grower, Irrigation Specialist, Landscape Architect, Landscape Contractor, Pest Control Advisor, Plant Breeder, Sports Turf Superintendent, Urban Forester and more.

Total Units: 29
Required Courses
Semester 1 (8 units)
Course # Name Units  
AGRI B49 Agriculture Leadership Training 2.0  
ORNH B1 Introduction to Ornamental Horticulture 3.0  
ORNH B6 Ornamental Plant Identification: Ground Covers, Vines, and Dwarf Shrubs or 3.0  
ORNH B3 Landscape Installation and Maintenance 3.0
Semester 2 (7 Units)
ORNH B48WE Occupational Work Experience Education 1.0  
ORNH B4 Plant Propagation 3.0  
ORNH B2 Fundamentals of Nursery Management and Plant Production or 3.0  
ORNH B8 Introduction to Landscape Design 3.0
Semester 3 (7 Units)
Course # Name Units  
CRPS B3 Integrated Pest Management 3.0  
ORNH B3 Landscape Installation and Maintenance or 3.0  
ORNH B6 Ornamental Plant Identification: Ground Covers, Vines, and Dwarf Shrubs or 3.0  
ORNH B48WE Occupational Work Experience Education 1.0
Semester 4 (7 Units)
ORNH B7 Ornamental Plant Identification: Large Shrubs, Small Trees, Large Trees & Palms 3.0  
ORNH B2 Fundamentals of Nursery Management and Plant Production or 3.0  
ORNH B8 Introduction to Landscape Design 3.0  
ORNH B48WE Occupational Work Experience Education 1.0
Forestry

Associate of Arts Degree

The program provides a broad general experience in the arts and science to develop an individual with a well-rounded education, and a core of basic courses which furnish the student with a perspective of the scientific and professional area of forestry, natural resources, fisheries and wildlife. The pre-forestry, resource conservation and wildlife management program at Bakersfield College should conform to the recommended program as prescribed by the school to which the student wishes to transfer. Students planning to go to work after completing a two-year degree should complete the Associate in Science degree and not the Associate in Arts degree. Career opportunities include forestry, fishing industries and wildlife management.

To Achieve the Associate in Arts

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Forestry Associate in Arts.

Program Learning Outcomes

Upon successful completion, the student will:

- demonstrate managerial and leadership abilities in agriculture classes for employment that will enhance opportunities and success in the agriculture industry in the 21st century.
- master skills needed for baccalaureate level education or obtain a certificate.
- demonstrate specific skills within agriculture disciplines needed for employment

To Achieve the Associate in Science

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Forestry Associate in Arts.

Program Learning Outcomes

Upon successful completion, the student will:

- demonstrate managerial and leadership abilities in agriculture classes for employment that will enhance opportunities and success in the agriculture industry in the 21st century.
- master skills needed for baccalaureate level education or obtain a certificate.
- demonstrate specific skills within agriculture disciplines needed for employment

Career opportunities:

Forestry, fishing industries and wildlife management.

Total Units: 24

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B6</td>
<td>Forestry Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B3</td>
<td>Wildlife Management</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Occupational Work Experience Education</td>
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<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
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Choose 3 units from the following

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<th>Units</th>
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<tbody>
<tr>
<td>FORE B4</td>
<td>Wildlife Law Enforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B5</td>
<td>Identification of California Wildlife</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B7</td>
<td>Wildland Fire Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
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Total Units: 31

Required Courses

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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AGBS B2</td>
<td>Agricultural Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
<td>3.0</td>
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<tr>
<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
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<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
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</tr>
<tr>
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<td>Forestry Skills</td>
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</tr>
<tr>
<td>WEXP B248</td>
<td>Occupational Work Experience Education</td>
<td>3.0</td>
</tr>
<tr>
<td>AGRI B49</td>
<td>Agriculture Leadership Training</td>
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Select 7 units from the following

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<tbody>
<tr>
<td>FORE B3</td>
<td>Wildlife Management</td>
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</tr>
<tr>
<td>FORE B4</td>
<td>Wildlife Law Enforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B5</td>
<td>Identification of California Wildlife</td>
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</tr>
<tr>
<td>FORE B7</td>
<td>Wildland Fire Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B10</td>
<td>Plant Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>NRES B1</td>
<td>Range Management</td>
<td>3.0</td>
</tr>
<tr>
<td>NRES B2</td>
<td>Parks and outdoor Recreation</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Forestry
Certificate of Achievement

The Certificate of Achievement in Forestry is designed for students desiring to enter the workforce after completing one year of college. Many technician level careers are available in the forestry/natural resources/wildlife fields. Career opportunities include Forestry, natural resources, wildlife, parks and outdoor recreation, fisheries, rangeland and watershed technician positions.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Forestry Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate managerial and leadership abilities in agriculture classes for employment that will enhance opportunities and success in the agriculture industry in the 21st century.
- master skills needed for baccalaureate level education or obtain a certificate.
- demonstrate specific skills within agriculture disciplines needed for employment.

Total Units: 33
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS B2</td>
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<td>SOIL B1</td>
<td>Introduction to Soil Science</td>
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</tr>
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<td>AGRI B1</td>
<td>Agriculture, Environment and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B1</td>
<td>Introduction to Forestry</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B6</td>
<td>Forestry Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Occupational Work Experience Education</td>
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<tr>
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<td>Agriculture Leadership Training</td>
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Select 12 units from the following

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<tbody>
<tr>
<td>FORE B3</td>
<td>Wildlife Management</td>
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</tr>
<tr>
<td>FORE B4</td>
<td>Wildlife Law Enforcement</td>
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<td>FORE B5</td>
<td>Identification of California Wildlife</td>
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</tr>
<tr>
<td>FORE B7</td>
<td>Wildland Fire Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CRPS B3</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
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<tr>
<td>CRPS B10</td>
<td>Plant Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>NRES B1</td>
<td>Range Management</td>
<td>3.0</td>
</tr>
<tr>
<td>NRES B2</td>
<td>Parks and Outdoor Recreation</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Registered Veterinary Technician
Job Skills Certificate

This certificate prepares students for the California Veterinary Medical Board RVT Licensing Exam. Students must also complete the CVMB required clinic hours by working in a veterinary hospital/clinic. Course eligibility expires five years from the time it is completed for the state exam. Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Registered Veterinary Technicians Job Skills Certificate. Students who do not choose to become licensed RVT’s are still able to work in the field as Animal Health Technicians.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Registered Veterinary Technician Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate proficiency in animal care procedures and skills required for employment and enhancement of opportunities and success in the veterinary/pet care industry.
- master academic proficiency in veterinary medicine needed to obtain a job skills certificate.
- improve program graduate success rates for passing California Veterinary Medical Board licensing exam.

Total Units: 17.5
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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<tbody>
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<td>ANSC B83</td>
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<td>ANSC B84</td>
<td>Small Animal Diseases</td>
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</tr>
<tr>
<td>ANSC B85</td>
<td>Large Animal Diseases</td>
<td>1.5</td>
</tr>
<tr>
<td>ANSC B86</td>
<td>Pharmacology for Veterinary Technicians</td>
<td>1.5</td>
</tr>
<tr>
<td>ANSC B88</td>
<td>Surgery, Dental and Anesthesiology for Veterinary Technicians</td>
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<tr>
<td>ANSC B90</td>
<td>Emergency Medicine, Surgery/Nursing Procedures for Veterinary Technicians</td>
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<td>ANSC B92</td>
<td>Clinical Pathology for Veterinary Technicians</td>
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<tr>
<td>ANSC B94</td>
<td>Caged Birds, Laboratory, and Exotic Animal Medicine</td>
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<tr>
<td>ANSC B96</td>
<td>Radiology, Ultrasound, and Diagnostic Imaging for Veterinary Technology</td>
<td>1.5</td>
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</table>
American Sign Language

Degree
American Sign Language, Associate of Arts
American Sign Language
Associate of Arts Degree

The major in American Sign Language provides a linguistic exploration of the various components of ASL and an in-depth examination of the culture of deaf people. The objective of the program is to provide students with a foundation for achieving fluency and the opportunity to transfer to a four-year institution. With additional training, employment opportunities include interpreting, teaching, and social service. If transferring to an institution other than UC or CSU, students should check with the receiving institution to ensure transferability of ASL courses as foreign language credit.

The AA degree is designed to provide students with multiple career pathways including interpreting, social services, and teaching, among others.

Program Learning Outcomes
Upon successful completion, the student will:

• communicate clearly and effectively in ASL, expressing and recognizing specific manual and non-manual language elements.
• share critical insight into the nature of language and culture through continued participation in the deaf community.
• Employ video technology for self-, peer-, and mentor-feedback for ongoing skills development, assessment, and communication.
• produce college level American Sign Language and English texts demonstrating knowledge of, and critical inquiry into, key concepts or issues in American Sign Language, the Deaf Community, and Deaf Culture.

To Achieve the Associate in Arts
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Animal Science Associate in Arts.

To Transfer Coursework
A minimum of 19 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Total Units: 19

Required Courses
Course #   Name                        Units
ASL B1    American Sign Language 1   4.0
ASL B2    American Sign Language 2   4.0
ASL B3    American Sign Language 3   4.0
ASL B4    American Sign Language 4   4.0

Select 3 units from the following
ASL B6    American Sign Language 6   3.0
ASL B7    American Sign Language 7   3.0

Category
Units in Major                        19.0
CSU GE Breadth                        39.0-41.0
Possible double counting of GE’s      8.0-12.0
Degree Total                          60.0
Anthropology

Degree
Anthropology, Associate of Arts for Transfer
# Anthropology

## Associate of Arts Degree for Transfer

The Associate of Arts in Anthropology Degree for Transfer is designed to provide students a clear pathway to the CSU anthropology major and completion of the anthropology baccalaureate degree, to grant guaranteed admission to a CSU to a similar major, with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

Anthropology is the scientific study of humanity, examining human biology and culture today and in the past; and biological and cultural change through time. Students with an Anthropology major concentrate in one of the following areas: cultural anthropology, linguistic anthropology, biological/physical anthropology or archaeology. The major in anthropology prepares students for a variety of research/academic positions (e.g. museums, colleges and universities, zoos); and non-academic/research positions (e.g. in business, medicine, cultural resource management, government and NGO’s). The objective of this program is to prepare students for transfer to a four-year university. Anthropology’s emphasis on research skills, organizational skills, critical thinking, technical writing, project management and use of a holistic perspective make it an excellent undergraduate major for a variety of fields and graduate programs.

## Requirements for all AA-T and AS-T Degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the District.
- The obtaining of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. ‘P’ (Pass) grade is not acceptable for courses in the major.

## Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate an understanding of the biocultural nature of humanity through application of the core concepts, methods, and theories, in cultural anthropology, biological anthropology, and archaeology to explanations of human diversity.
- describe the origins and history of the discipline of American anthropology; its unique perspectives and approaches to the study of humanity; its ethical challenges; its dual nature as the humanistic/scientific study of humanity; and its uses and value in today’s world.
- critically evaluate information about human societies and origins without reliance on taken-for-granted assumptions, using a combination of skills, including the scientific method, qualitative social analysis, and reflective writing.

## Total Units: 19-20

### Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH B1</td>
<td>Physical Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH B2</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH B3</td>
<td>Introduction to Archeology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**List A - Select 3-4 Units from the following:**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH B5</td>
<td>North American Indians</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B5</td>
<td>Elementary Statistics for the Behavioral and Social Sciences</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**List B - Select 4 Units from the following:**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC B6</td>
<td>Research Methods for the Behavioral and Social Sciences</td>
<td>4.0</td>
</tr>
<tr>
<td>GEOL B10</td>
<td>Introduction to Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL B10L</td>
<td>Introduction to Geology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ERSC B10</td>
<td>Introduction to Earth Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ERSC B10L</td>
<td>Introduction to Earth Science Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**List C - Select 3 Units from the following:**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B1</td>
<td>Art Appreciation</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG B2</td>
<td>Human Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B24</td>
<td>A Survey of World Music</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL B37</td>
<td>Introduction to Word Religions</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Category**

Units in Major: 19.0-20.0

Degree Total: 60.0
Apprenticeship

Degree
Apprenticeship, Associate of Arts

Certificate
Apprenticeship, Certificate of Achievement

Fields of Apprenticeship Available:
Carpentry Apprenticeship
Electrician Apprenticeship
Operating Engineer Apprenticeship
Plumbers & Steamfitters Apprenticeship
Sheetmetal Apprenticeship
Apprenticeship

Associate of Arts

Apprenticeship courses are designed for indentured apprentices under the Shelley-Maloney California Apprenticeship Standards Act. The Apprentice Agreement states that the student will supplement on-the-job training with related classroom instruction during each year of apprenticeship.

Apprentice classes meet three to eight hours per week and yield two to six units of credit. Joint Apprenticeship Committees administering each program are composed of representation from labor, management, California State Division of Apprenticeship Standards, and Bakersfield College. These committees adopt state approved standards for operation and assure equal opportunity for applicants. Related training in apprenticeable occupations, in addition to those listed below, may be offered as the need arises.

Information for entry into apprenticeship programs may be obtained from the college coordinator of apprenticeship training. Interested persons are encouraged to apply for any of these programs and may contact the Bakersfield College Apprenticeship Department at 661/395-4408 for further information.

Program Learning Outcomes

Upon successful completion, the student will:

• successfully transition to the Journeyman level designation and certification, upon successful completion of requirements by the California Division of Apprenticeship Standards.
• demonstrate measures used by trades in use of tools, techniques, hands-on skills, and competencies for practices in specific occupations.
• identify and use equipment of specific trade in meeting standards for measurement and calibration.
• read, and apply specific trade instructions and design for construction or production outcomes as required by the specific trade practices and standards.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apprenticeship classes for duration of</td>
<td>12-45</td>
</tr>
<tr>
<td>apprentice period (45 units maximum)</td>
<td></td>
</tr>
<tr>
<td>Work Experience (4 Semesters, 16 units max)</td>
<td>4-16</td>
</tr>
<tr>
<td>Related technical subjects as recommended by JAC</td>
<td>0-6</td>
</tr>
</tbody>
</table>

In addition, students must comply with the requirements as shown in the catalog under Graduation Requirement. The department can assist the student in planning for the AA degree.

Apprenticeship

Certificate of Achievement

Apprenticeship courses are designed for indentured apprentices under the Shelley-Maloney California Apprenticeship Standards Act. The Apprentice Agreement states that the student will supplement on-the-job training with related classroom instruction during each year of apprenticeship.

Apprentice classes meet three to eight hours per week and yield two to six units of credit. Joint Apprenticeship Committees administering each program are composed of representation from labor, management, California State Division of Apprenticeship Standards, and Bakersfield College. These committees adopt state approved standards for operation and assure equal opportunity for applicants. Related training in apprenticeable occupations, in addition to those listed below, may be offered as the need arises.

Information for entry into apprenticeship programs may be obtained from the college coordinator of apprenticeship training. Interested persons are encouraged to apply for any of these programs and may contact the Bakersfield College Apprenticeship Department at 661/395-4408 for further information.

Program Learning Outcomes

Upon successful completion, the student will:

• successfully transition to the Journeyman level designation and certification, upon successful completion of requirements by the California Division of Apprenticeship Standards.
• demonstrate measures used by trades in use of tools, techniques, hands-on skills, and competencies for practices in specific occupations.
• identify and use equipment of specific trade in meeting standards for measurement and calibration.
• read, and apply specific trade instructions and design for construction or production outcomes as required by the specific trade practices and standards.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apprenticeship classes for duration of</td>
<td>12-45</td>
</tr>
<tr>
<td>apprentice period (45 units maximum)</td>
<td></td>
</tr>
<tr>
<td>Work Experience (4 Semesters, 16 units max)</td>
<td>16</td>
</tr>
<tr>
<td>Electives (as recommended by JAC to reach 30 units total, if needed)</td>
<td>4-16</td>
</tr>
</tbody>
</table>
Architecture

**Degree**
Architectural Drafting, Associate of Science

**Certificate**
Architectural Computer Aided Drafting, Job Skills Certificate
Architectural Drafting
Associate of Science Degree

This degree covers the principles of architectural CAD to include basic 2D and 3D AutoCAD application as well as BIM related software covering architectural practices including both residential and light commercial working documents. Emphasis is also placed on architectural delineation using software.

To Achieve the Associate in Science
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Architectural Drafting Associate in Science.

To Transfer Coursework
A minimum of 40.5 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills required for employment in the architecture industry.
• demonstrate problem solving skills used in architectural design.
• demonstrate a deep understanding of the core material required for transfer to a four-year university architectural degree program or for certification in architecture.

Total Units: 40.5

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B1</td>
<td>Introduction to Architecture and Environmental Design</td>
<td>1.5</td>
</tr>
<tr>
<td>ARCH B6</td>
<td>Materials of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B11</td>
<td>Design and Perspective Drawing</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B12</td>
<td>Design Drawing and Color</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B16</td>
<td>Digital Tools for Graphics Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B21</td>
<td>Architectural Design Fundamentals I</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B22</td>
<td>Architectural Design Fundamentals II</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B30</td>
<td>Residential Building Information Modeling</td>
<td>4.0</td>
</tr>
<tr>
<td>ARCH B33</td>
<td>Architectural Computer Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>MATH B1A</td>
<td>Pre-calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6A</td>
<td>Analytic Geometry/Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2A</td>
<td>General Physics – Mechanics and Heat</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Architectural Computer Aided Drafting
Job Skills Certificate

This certificate covers the principles of architectural computer aided drafting to include basic 2D and 3D AutoCAD application as well as BIM related software covering architectural practices including both residential and light commercial working documents. Emphasis is also placed on architectural delineation using software.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Architectural CAD Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate a deep understanding of the core material required for transfer to a four-year university degree program or for certification in the department programs.
• demonstrate problem solving skills used in industrial design and product development.

Total Units: 11

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design CAD</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B16</td>
<td>Digital Tools for Graphics Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B33</td>
<td>Architectural Computer Practice</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Art

Degree
Studio Arts, Associate of Arts Degree for Transfer

Certificates
Graphic Design, Certificate of Achievement
Media Arts, Certificate of Achievement
Photography, Certificate of Achievement
Studio Arts
Associate of Arts Degree for Transfer

The Associate in Arts in Studio Arts for Transfer is intended for those transfer-directed students who plan to complete an AA in Art because it guarantees admission to the CSU system (but not to a particular campus or major). In order to earn the degree, students must complete a maximum of 60 required semester units of CSU-transferable coursework which includes the CSU General Education Breadth or IGETC requirements with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the Associate in Arts in Studio Arts for Transfer degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit” major).

This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

The Bakersfield College Art Department wishes to expose students to study in a wide variety of media, and to prepare them to make societal contributions by becoming citizens who are visually literate, culturally aware, skilled in creative problem-solving, and aesthetically sensitive.

Program Learning Outcomes
The successful student will be able to:

- demonstrate an understanding of the principles, elements, and language of art/design.
- demonstrate the ability to critique their own work, as well as the work of other students; and defend their creative choices verbally.
- demonstrate an understanding of a portfolio or “body of work.”

Requirements for the Associate of Arts Degree for Transfer
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Studio Arts Associate of Arts Degree for Transfer.

Total Units: 24
Required Core - 12 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B36</td>
<td>Survey of Western Art II*</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B4</td>
<td>Two Dimensional Design*</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B5</td>
<td>Three Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B2</td>
<td>Drawing I*</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A - Choose 3 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B35</td>
<td>Survey of Western Art I*</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B37</td>
<td>Survey of Art – Latin America*</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B - Curricular Areas - Choose 9 Units**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B8</td>
<td>Figure Drawing I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B6</td>
<td>Acrylic Painting I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B10</td>
<td>Ceramics I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B13</td>
<td>Sculpture I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B20</td>
<td>Digital Art – Vector Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B17</td>
<td>Black and White Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Local Studio Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B16</td>
<td>Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B24</td>
<td>Digital Art - Raster Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B25</td>
<td>Typography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B42</td>
<td>Graphic Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Second Semester Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B9</td>
<td>Figure Drawing II</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B11</td>
<td>Ceramics II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Category

<table>
<thead>
<tr>
<th>Units in Major</th>
<th>CSU GE Breadth</th>
<th>Possible double counting of GE’s</th>
<th>Degree Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.0</td>
<td>39.0</td>
<td>12.0</td>
<td>60.0</td>
</tr>
</tbody>
</table>

*Courses with an asterisk can be double counted for General Education.

**A student can choose any other “Local studio course” or “Second Semester course” to complete the 9 unit “Curricular” requirement:

No additional local requirements for this degree will be imposed.
**Graphic Design**

**Certificate of Achievement**

The program is designed to prepare students for entry level positions in graphic design related fields such as: advertising, graphic design, illustration, and digital imaging. The core learned disciplines are the principles of design, an understanding of the visual elements, exposure to art and design history, conceptual visual problem solving, and the production of a portfolio using industry-standard software and processes.

**To achieve the Certificate of Achievement**

Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Certificate of Achievement in Graphic Design.

**Program Learning Outcomes**

At the end of the program, students will:

- demonstrate an understanding of the principles, elements, and language common to graphic design.
- demonstrate the ability to critique their own work, as well as the work of other students; and defend their creative choices verbally and in writing.
- demonstrate an understanding of a portfolio or “body of work”.
- demonstrate the ability to use industry standard software and hardware to complete projects.
- demonstrate proficiency in the use of images and typography to create successful design solutions.
- demonstrate an understanding of historic and contemporary graphic design practices.

**Total Units: 18**

**Required Courses**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B20</td>
<td>Digital Art - Vector</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B24</td>
<td>Digital Art - Raster</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B16</td>
<td>Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B25</td>
<td>Typography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B40</td>
<td>Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B41</td>
<td>Advertising Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B42</td>
<td>Graphic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B25</td>
<td>Typography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B40</td>
<td>Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B41</td>
<td>Advertising Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B42</td>
<td>Graphic Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Media Arts**

**Certificate of Achievement**

The Bakersfield College Media Arts Program is designed to prepare students for entry-level positions in media arts. Visual communicators increasingly need media arts skills, and this program will provide entry-level competencies for a number of career paths, such as: videographer, photographer, motion graphics designer, animator, video editor, film editor, and filmmaker. This program is a logical extension of the photography and graphic design certificates currently offered in the Bakersfield College Art Department.

**To achieve the Certificate of Achievement**

Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Certificate of Achievement in Media Arts.

**Program Learning Outcomes**

At the end of the program, students will:

- produce a portfolio of original digital content, using industry standard software and hardware.
- demonstrate an understanding of the visual principles and elements of as they pertain to media arts.
- demonstrate the ability to think critically about their own work and the work of others.

**Total Units: 18**

**Required courses**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B20</td>
<td>Digital Art - Vector</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B24</td>
<td>Digital Art - Raster</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B16</td>
<td>Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B26</td>
<td>Multimedia</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B43</td>
<td>Video Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B44</td>
<td>Motion Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B45</td>
<td>Animation</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Photography
Certificate of Achievement

The program is designed to prepare students for entry level positions in photography. The core learned disciplines are photography, photographic lighting, an understanding of the visual elements, exposure to art and design history, conceptual visual problem solving, and the production of a portfolio using industry-standard software and processes.

To achieve the Certificate of Achievement
Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Certificate of Achievement in Photography.

Program Learning Outcomes
At the end of the program, students will demonstrate:
• an understanding of the principles, elements, and language common to photography.
• the ability to critique their own work, as well as the work of other students; and defend their creative choices verbally and in writing.
• an understanding of a portfolio or “body of work”.
• the ability to use industry standard raster imaging applications.
• the ability to use lighting equipment, cameras and industry standard photographic equipment.
• an understanding of historic and contemporary photographic practices.

Total Units: 18
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B16</td>
<td>Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B20</td>
<td>Digital Art - Vector</td>
<td>3.0</td>
</tr>
<tr>
<td>or ART B24</td>
<td>Digital Art - Raster</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B17</td>
<td>Black and White Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B46</td>
<td>Advanced Photography I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B47</td>
<td>Advanced Photography II</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B48</td>
<td>Advanced Photography III</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Automotive

**Degree**
Automotive Technology, Associate of Science

**Certificates**
- Auto Engine Overhaul and Repair, Certificate of Achievement
- Auto Tune-Up and Emission, Certificate of Achievement
- Automotive Heating, Ventilation & Air Conditioning, Certificate of Achievement
- Automotive Management, Certificate of Achievement
- Automatic Transmissions, Certificate of Achievement
- Brake Systems, Certificate of Achievement
- Electrical and Electronic Systems, Certificate of Achievement

**Certificates**
- Engine Overhaul and Repair, Certificate of Achievement
- Engine Performance, Certificate of Achievement
- Light Duty Diesel Performance, Certificate of Achievement
- Manual Drivetrain and Axles, Certificate of Achievement
- Suspension and Steering, Certificate of Achievement
- Automotive Management, Job Skills Certificate
Auto Engine Overhaul*  
Certificate of Achievement

This program develops student’s knowledge and skills in the areas of automotive and light truck engine overhaul and machining procedures. Program includes instruction in theory of operation, diagnostic, and repair procedures.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Auto Engine Overhaul Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four-year university degree program or for certification in the department programs.

Career Opportunities:
Automotive Technician, Steering Technician.

* NOTE: This Certificate of Achievement is being replaced by: “Engine Overhaul and Repair.” (page 96) Consult with department for more information.

Total Units: 23-24

Required Courses — Day Students

Course #  Title  Units
AUTO B2A  Engine Repair & Machining  9.0
AUTO B2B  Advanced Engine Repair & Machining  9.0
INDT B10  Occupational Readiness  3.0 (or equivalent)

Required Courses — Night Students

Course #  Title  Units
AUTO B75A  Introduction to Engine Overhaul  3.0
AUTO B75B  Engine Repair Techniques  3.0
AUTO B75C  Advanced Engine Overhaul  3.0
AUTO B75D  Advanced Engine Machining  3.0
INDT B10  Occupational Readiness  3.0 (or equivalent)

Electives — for a total of at least 23 units

Course #  Title  Units
AUTO B1AB  Introduction to Automotive Technology  4.0
AUTO B14  Auto Tune-Up: Electrical/ Ignition/Accessories  11.0
AUTO B15  Auto Tune-Up: Fuel Systems and Emission Control  11.0
AUTO B64  Automotive Electricity and Electronics  4.0
AUTO B61  Basic & Enhanced Area Clean Air  4.0
Car Course
AUTO B112  Automotive Transmissions and Gear Boxes  9.0
INDT B275  Special Problems in Automotive Technology  2.0
WELD B1A  Introduction to Oxygen Acetylene Welding and Cutting  2.0
WELD B1B  Introduction to the Welding Processes  2.0

Auto Tune-Up and Emission*  
Certificate of Achievement

This program develops student’s knowledge and skills in the areas of automotive and light truck tune-up and emission control systems. Program includes instruction in theory of ignition, fuel, and computer control systems as well as emission test procedures and complete diagnostic and repair procedures.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Auto Tune-Up and Emissions Systems Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four-year university degree program or for certification in the department programs.

* NOTE: This Certificate of Achievement is being replaced. Consult with department for more information.

Total Units: 26

Required Courses

Course #  Title  Units
AUTO B14  Auto Tune-Up: Electrical/ Ignition/Accessories  11.0
AUTO B15  Auto Tune-Up: Fuel Systems and Emission Control  11.0
INDT B10  Occupational Readiness  3.0 (or equivalent)

Electives — for a total of at least 26 units

Course #  Title  Units
AUTO B59  Automotive Air Conditioning  4.0
AUTO B64  Automotive Electricity and Electronics  4.0
AUTO B61  Basic & Enhanced Area Clean Air  4.0
Car Course
AUTO B75A  Introduction to Engine Overhaul  3.0
AUTO B2A  Engine Repair & Machining  9.0
ELET B1  Basic Electronics (DC and AC)  4.0
ENGL B50  Introduction to College Composition  4.0
INDT B275  Special Problems in Automotive Technology  2.0
Automotive Technology

Associate of Science Degree

The Associate in Science in Automotive Technology is designed to prepare students for optimal success in higher education and technical careers in an environment that will encourage a lifelong pursuit of learning. Completers are prepared to become ASE Certified in a variety of subjects ranging from General Service, Licensed Smog Technician, Engine Rebuilding, Transmission Repair, Brakes, Alignment, Diesel Service, Automotive HVAC and many more. Teaching and learning strategies will include student-centered, competency-based, and hands-on instruction. In addition, the program will set in place quality customer/technician and employer/employee relationship skills to assure workplace and educational competencies have been met. Upon completion of the associate’s degree program, graduates will be eligible for entry level employment at automotive, agricultural and commercial equipment dealerships and independent repair facilities. Graduates have the potential to work in management and other related areas of service operations.

Program Learning Outcomes

Upon successful completion, the student will:
- demonstrate proficiency in technical skills and safety principles required for industrial employment.
- demonstrate their ability to assess, evaluate and solve problems common to automotive, industrial, and agricultural industries.
- demonstrate a thorough understanding of the core material required for transfer to a four year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Automotive Brakes Technician

Total Units: 36
Required Courses - 24 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B20</td>
<td>Engine Theory, Design and Diagnosis</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B21</td>
<td>Upper Engine Systems and Machining</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B30</td>
<td>Electrical and Electronic Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B33</td>
<td>Engine Performance</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B40</td>
<td>Suspension, Steering, and Wheel Alignment</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B43</td>
<td>Brake Systems</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Elective Courses (select 12 units from the following):
- AUTO B3 Fundamentals of Automotive Management and Services 4.0
- AUTO B22 Lower Engine Systems and Machining 5.0
- AUTO B23 Engine Assembly and Performance 5.0
- AUTO B31 Advanced Electrical and Electronic Systems 5.0
- AUTO B34 Advanced Engine Performance 5.0
- AUTO B36 Light Duty Diesel Performance 4.0
- AUTO B39 Level 1 and Level 2 4.0
- AUTO B46 Automatic Transmissions 5.0
- AUTO B48 Manual Transmissions and Drivetrain 4.0
- AUTO B49 Automotive Heating and Air Conditioning 4.0

Automatic Transmissions
Certificate of Achievement

The Automatic Transmission Certificate signifies that the student has developed skills in the diagnosis, repair of various types of automatic transmissions found in automotive, agriculture and industrial applications. Students can implement the skills developed in these courses in performance shops, independent repair shops, dealerships, construction companies, agriculture companies, government agencies, etc.

Students earning this certificate will be prepared to further pursue certification through ASE in the A2 area.

Program Learning Outcomes

Upon successful completion, the student will:
- demonstrate proficiency in technical skills and safety principles required for employment in the automatic transmission rebuilding industry.
- demonstrate their ability to assess, evaluate and solve problems common to automatic transmission repair in the automotive, industrial, and agricultural industries.
- demonstrate a thorough understanding of the core material of automatic transmission rebuilding required for transfer to a four year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Automotive Transmission Technician, Industrial Mechanic

Total Units: 13
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B11</td>
<td>Introduction to Automotive Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B30</td>
<td>Electrical and Electronic Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B46</td>
<td>Automatic Transmissions</td>
<td>5.0</td>
</tr>
</tbody>
</table>
Automotive Heating & Air Conditioning Certificate of Achievement

The Automotive Heating and Air Conditioning Certificate signifies that the student has developed skills in the diagnosis and repair of various types of heating and air conditioning systems found in automotive, agriculture and industrial applications. Students can implement the skills developed in the these courses in dealerships, independent repair shops, performance shops, construction companies, agriculture companies, government agencies, etc.

Students earning this certificate will be prepared to further pursue certification through ASE in the A7, T7, H7, and S7 areas as well as MACS certification under Section 609 of the Clean Air Act.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment in the automotive heating and air conditioning industry.
• demonstrate their ability to assess, evaluate and solve automotive heating and air conditioning problems common to automotive, industrial, and agricultural industries.
• demonstrate a thorough understanding of the core material automotive heating and air conditioning required for transfer to a four year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Automotive HVAC Technician.

Total Units: 17
Required Courses
<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B11</td>
<td>Introduction to Automotive Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B30</td>
<td>Electrical and Electronic Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B31</td>
<td>Advanced Electrical and Electronic Systems</td>
<td>5.0</td>
</tr>
<tr>
<td>AUTO B49</td>
<td>Automotive Air Conditioning</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Automotive Management Certificate of Achievement

The Automotive Management Certificate signifies that the student has developed the knowledge and skills to seek entry level employment in the customer service areas found in automotive, agriculture and industrial applications. Students can implement the skills developed in the these courses in parts distribution, the Department of Motor Vehicles (DMV), dealerships, independent repair shops, performance shops, construction companies, agriculture companies, government agencies, etc.

Students earning this certificate will be prepared to further pursue certification through ASE in the C1, P2, and P4 areas.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment in the automotive management industry.
• demonstrate their ability to assess, evaluate and solve automotive management problems common to automotive, industrial, and agricultural industries.
• demonstrate a thorough understanding of the core automotive management material required for transfer to a four year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Automotive Service Writer, Automotive Service Manager.

Total Units: 12.5
Required Courses
<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B3</td>
<td>Fundamentals of Automotive Management and Services</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B10</td>
<td>Automotive Safety</td>
<td>.5</td>
</tr>
<tr>
<td>AUTO B11</td>
<td>Introduction to Automotive Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>STDV B1</td>
<td>Educational Planning</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Brake System Certificate of Achievement

The Brakes Certificate signifies that the student has developed skills in the diagnosis and repair of various types of brake systems found in automotive, agriculture and industrial applications. Students can implement the skills developed in these courses in dealerships, independent repair shops, performance shops, construction companies, agriculture companies, government agencies, etc.

Students earning this certificate will be prepared to further pursue certification through ASE in the A5, T4, H4, and S4 areas as well as certification for the Brake Adjuster License.

This program prepares students for careers in Transportation Industry and Automotive Industry. The focus of the Automotive Department as a whole is to equip students with the necessary knowledge and technical skills to successfully enter the workforce in the automotive industry, transportation industry, agriculture industry, and other related industrial and mechanical fields. This certificate will equip students to perform service, diagnosis, and repair on brake systems in the above listed industries.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment in the transportation and related industries performing brake system work.
• demonstrate their ability to assess, evaluate and solve brake systems problems common to automotive, industrial, and agricultural industries.
• demonstrate a thorough understanding of the core brake systems material required for transfer to a four year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Automotive Brakes Technician

<table>
<thead>
<tr>
<th>Total Units: 12</th>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course #</td>
<td>Name</td>
</tr>
<tr>
<td>AUTO B11</td>
<td>Introduction to Automotive Technology</td>
</tr>
<tr>
<td>AUTO B30</td>
<td>Electrical and Electronic Systems</td>
</tr>
<tr>
<td>AUTO B43</td>
<td>Brake Systems</td>
</tr>
</tbody>
</table>

Electrical and Electronic Systems Certificate of Achievement

The Electrical and Electronic Systems Certificate signifies that the student has developed skills in the diagnosis and repair of various types of electrical and electronic systems found in automotive, agriculture and industrial applications. Students can implement the skills developed in these courses in dealerships, independent repair shops, performance shops, construction companies, agriculture companies, government agencies, etc.

Students earning this certificate will be prepared to further pursue certification through ASE in the A6, T6, H6, S6, and L3 areas as well as certification for the Lamp Adjuster License.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment in the transportation and related industries performing electrical and electronic repair work.
• demonstrate their ability to assess, evaluate and solve problems common to electrical and electronic repair in the automotive, industrial, and agricultural industries.
• demonstrate a thorough understanding of the core material of electrical and electronic systems required for transfer to a four year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Automotive Electronics Technician

<table>
<thead>
<tr>
<th>Total Units: 13</th>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course #</td>
<td>Name</td>
</tr>
<tr>
<td>AUTO B11</td>
<td>Introduction to Automotive Technology</td>
</tr>
<tr>
<td>AUTO B30</td>
<td>Electrical and Electronic Systems</td>
</tr>
<tr>
<td>AUTO B31</td>
<td>Advanced Electrical and Electronic Systems</td>
</tr>
</tbody>
</table>
Engine Overhaul and Repair Certificate of Achievement

The Engine Overhaul and Repair Certificate signifies that the student has developed skills in the diagnosis, repair, and machining of various types of internal combustion engines, including gas and diesel engines found in automotive, agriculture, and industrial applications. Students can implement the skills developed in the engine rebuilding courses in engine machine shops, performance shops, dealerships, construction companies, agriculture companies, government agencies, etc.

Students earning this certificate will be prepared to further pursue certification through ASE (Automotive Service Excellence) in the A1, A8, H1, H2, S2, T1, T2 areas as well as certification through the Automotive Engine Rebuilders Association (AERA).

This program prepares students for careers in Automotive, Transportation, Agricultural, Oilfield and Construction Industries. The focus of the Automotive Department as a whole is to equip students with the necessary knowledge and technical skills to successfully enter the workforce in the automotive industry, transportation industry, agriculture industry, and other related industrial and mechanical fields. This certificate will equip students to perform service, diagnosis, and repair of various types of internal combustion engines, including gas and diesel engines, in the above listed industries. This certificate also provides necessary training for students to pursue certification in many areas through ASE and AERA.

Program Learning Outcomes
Upon successful completion, the student will:

• demonstrate proficiency in technical skills and safety principles required for employment in the engine rebuilding industry.
• demonstrate their ability to assess, evaluate and solve problems common to engine repair in the automotive, industrial and agricultural industries.
• demonstrate a thorough understanding of the core material of engine repair required for transfer to a four year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Engine Repair Technician, Industrial Engine Technician, Industrial Mechanic

Total Units: 18

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B20</td>
<td>Engine Theory, Design and Diagnosis</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B21</td>
<td>Upper Engine Systems and Machining</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B22</td>
<td>Lower Engine Systems and Machining</td>
<td>5.0</td>
</tr>
<tr>
<td>AUTO B23</td>
<td>Engine Assembly and Performance</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Engine Performance Certificate of Achievement

The Engine Performance Certificate signifies that the student has developed skills in the diagnosis and repair of various types of fuel, emission, and computer controlled systems found in automotive, agriculture and industrial applications. Students can implement the skills developed in the these courses in dealerships, independent repair shops, performance shops, construction companies, agriculture companies, government agencies, etc.

Students earning this certificate will be prepared to further pursue certification through ASE (Automotive Service Excellence) in the A8 and L1 areas as well as certification for the BAR (California Bureau of Automotive Repair) Specified Diagnostic and Repair training.

This program prepares students for careers in Transportation Industry and Automotive Industry. The focus of the Automotive Department as a whole is to equip students with the necessary knowledge and technical skills to successfully enter the workforce in the automotive industry, transportation industry, agriculture industry, and other related industrial and mechanical fields. This certificate will equip students to perform service, diagnosis, and repair of fuel and emission systems in the above listed industries. This certificate also provides necessary training for students to obtain their California State Smog Repair License.

Program Learning Outcomes
Upon successful completion, the student will:

• demonstrate proficiency in technical skills and safety principles required for employment in the transportation and related industries performing engine performance work.
• demonstrate their ability to assess, evaluate and solve engine performance problems common to automotive, industrial, and agricultural industries.
• demonstrate a thorough understanding of the core engine performance material required for transfer to a four year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Smog Technician.

Total Units: 17

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B20</td>
<td>Engine Theory, Design and Diagnosis</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B30</td>
<td>Electrical and Electronic Systems</td>
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<td>AUTO B33</td>
<td>Engine Performance</td>
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</tr>
<tr>
<td>AUTO B34</td>
<td>Advanced Engine Performance</td>
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</tbody>
</table>
**Light Duty Diesel Performance Certificate of Achievement**

The Light Duty Diesel Performance Certificate signifies that the student has developed skills in the diagnosis and repair of various types of diesel engine, fuel, and emission systems found in automotive, agriculture and industrial applications. Students can implement the skills developed in these courses in dealerships, independent repair shops, performance shops, construction companies, agriculture companies, government agencies, etc. Students earning this certificate will be prepared to further pursue certification through ASE in the A9 and L2 areas.

This program prepares students for careers in Transportation Industry and Automotive Industry. This is a strong and growing area of the automotive repair industry especially in Bakersfield and the surrounding areas where many diesel vehicles are used for private use, work in the oil fields, agriculture industry, and other transportation fields.

**Program Learning Outcomes**

Upon successful completion, the student will:

- demonstrate proficiency in technical skills and safety principles required for employment in the transportation and related industries performing diesel performance work.
- demonstrate their ability to assess, evaluate and solve diesel performance problems common to automotive, industrial, and agricultural industries.
- demonstrate a thorough understanding of the core diesel performance material required for transfer to a four year university or certification in the department programs.

**Career Opportunities:**
Automotive Technician, Diesel Technician.

**Total Units: 16**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO B20</td>
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<tr>
<td>AUTO B30</td>
<td>4.0</td>
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<tr>
<td>AUTO B33</td>
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<tr>
<td>AUTO B36</td>
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<tr>
<td>AUTO B20</td>
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<td>AUTO B30</td>
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<tr>
<td>AUTO B33</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B36</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Manual Drivetrain and Axles Certificate of Achievement**

The Manual Drivetrain and Axles Certificate signifies that the student has developed skills in the diagnosis, repair of various types of manual transmissions and drive axles found in automotive, agriculture and industrial applications. Students can implement the skills developed in these courses in performance shops, independent repair shops, dealerships, construction companies, agriculture companies, government agencies, etc. Students earning this certificate will be prepared to further pursue certification through ASE in the A3 area.

This program prepares students for careers in Transportation Industry and Automotive Industry. The focus of the Automotive Program as a whole is to equip students with the necessary knowledge and technical skills to successfully enter the workforce in the automotive industry, transportation industry, agriculture industry, and other related industrial and mechanical fields. This certificate will equip students to perform manual transmission and drive axle service, diagnosis, and repair in the above listed industries.

**Program Learning Outcomes**

Upon successful completion, the student will:

- demonstrate proficiency in technical skills and safety principles required for employment in the manual transmission and drive axle rebuilding industry.
- demonstrate their ability to assess, evaluate and solve problems common to manual transmission and drive axle repair in the automotive, industrial, and agricultural industries.
- demonstrate a thorough understanding of the core material of manual transmission and drive axle rebuilding and repair required for transfer to a four year university or certification in the department programs.

**Career Opportunities:**
Automotive Technician, Automotive Transmission Technician, Industrial Mechanic.

**Total Units: 12**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
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<td>AUTO B11</td>
<td>4.0</td>
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<tr>
<td>AUTO B30</td>
<td>4.0</td>
</tr>
<tr>
<td>AUTO B48</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Suspension and Steering Certificate of Achievement

The Suspension and Steering Certificate signifies that the student has developed skills in the diagnosis, repair of various types of suspension and steering systems found in automotive, agriculture and industrial applications. Students can implement the skills developed in these courses in performance shops, independent repair shops, dealerships, construction companies, agriculture companies, government agencies, etc. Students earning this certificate will be prepared to further pursue certification through ASE in the A4, H5, S5, and T5 areas.

This program prepares students for careers in Transportation Industry and Automotive Industry. The focus of the Automotive Department as a whole is to equip students with the necessary knowledge and technical skills to successfully enter the workforce in the automotive industry, transportation industry, agriculture industry, and other related industrial and mechanical fields. This certificate will equip students to perform service, diagnosis, and repair on steering and suspension systems in the above-listed industries.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment in the transportation and related industries performing suspension and steering work.
• demonstrate their ability to assess, evaluate and solve problems common to suspension and steering system repair in the automotive, industrial, and agricultural industries.
• demonstrate a thorough understanding of the core suspension and steering system material required for transfer to a four-year university or certification in the department programs.

Career Opportunities:
Automotive Technician, Steering Technician.

Total Units: 12
Required Courses
Course # | Name | Units
AUTO B11 | Introduction to Automotive Technology | 4.0
AUTO B30 | Electrical and Electronic Systems | 4.0
AUTO B40 | Suspension, Steering and Wheel Alignment | 4.0

Automotive Management Job Skills Certificate

This program develops the student’s knowledge and basic skills to seek entry-level employment in the automotive services industry. These include a general technical knowledge of the automobile and light truck; automotive service writing including California legal requirements set forth by the Bureau of Automotive Repair; customer satisfaction including telephone and face-to-face interpersonal communications skills; handling warranty claims and documentation; DMV documentation and processing; use and understanding of general office keyboarding skills, and automotive parts sales and stocking systems.

Career opportunities include automotive repair front desk, occupations requiring a general technical knowledge of the automobile and light truck, automotive service writing including California legal requirements set forth by the Bureau of Automotive Repair, handling warranty claims, DMV documentation and processing, automotive parts sales and stocking systems.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Automotive Management Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will:
• understand shop and office personal safety and environmental hazards related to the automotive industry.
• understand how to write service repair orders using both written and computerized formats.
• demonstrate proper telephone and interpersonal communication skills.
• have knowledge of and practice in creating DMV documentation and processing.
• understand California consumer protection laws and the Bureau of Automotive Repairs regulations.
• have knowledge and practice of accepted work ethics in the automotive repair business.
• have knowledge of the automotive parts handling systems and sales techniques.
• have knowledge and practice of handling consumer warranty claims and documentation.

Total Units: 14
Required Courses
Course # | Title | Units
AUTO B1AB | Introduction to Automotive Technology | 4.0
AUTO B3 | Fundamentals of Automotive Management and Services | 4.0
INDT B10 | Occupational Readiness (or equivalent) | 3.0
COMP B5 | Introduction to Microsoft Office | 3.0
Biology

Degrees
Biology, Associate of Science Degree for Transfer
Human Biology, Associate of Science
The Associate in Science in Biology for Transfer degree is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Biology or similar major.

Program Learning Outcomes
The successful student will be able to:
- be able to demonstrate proficiency using a microscope.
- be able to research a topic, design experiments, synthesize and evaluate the information they find and will be able to justify and express their opinion on virtually any topic using the Scientific Method.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including the following:
- The Interssegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtention of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Additionally, the Associate in Science in Biology for Transfer allows students to learn the fundamental principles and practices of biology in order to create a solid foundation for their future personal, academic, or vocational endeavors. The Associate in Science in Biology Degree for Transfer also provides solid preparation that is appropriate for a variety of scientific disciplines.

Biology is the study and application of principles of cell biology, ecology, evolution, genetics, anatomy and physiology as it relates to humans and other organisms. Laboratory and field trip activities emphasize the integrated and interdependent nature of living systems. Course work trains students to use observation and investigation to identify questions and pursue answers using the scientific method. Graduates with baccalaureate degree may pursue jobs in a variety of fields including; biochemistry, biotechnology, botany, ecology, entomology, genetics, health, immunology, medicine, molecular biology, oceanography, pharmacy, teaching, wildlife management, zoology and related clinical fields. Biology majors may choose to specialize in research based on a particular organism or an aspect of biology related to those listed above.

Career Opportunities:
Biochemistry, biotechnology, botany, ecology, entomology, genetics, health, immunology, medicine, molecular biology, oceanography, pharmacy, teaching, wildlife management and zoology.

Total Units: 32

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B3A</td>
<td>General Biology I</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B3B</td>
<td>General Biology II</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List A - 22 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1A</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1B</td>
<td>General Chemistry and Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6A</td>
<td>Analytic Geometry/Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2A</td>
<td>General Physics-Mechanics and Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2B</td>
<td>General Physics-Sound, Light, Electricity</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Magnetism, Modern Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS B4A</td>
<td>Mechanics and Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4B</td>
<td>Heat, Electricity and Magnetism</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Category

<table>
<thead>
<tr>
<th></th>
<th>CSU</th>
<th>IGETC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units in Major</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>General Education</td>
<td>33</td>
<td>31</td>
</tr>
<tr>
<td>Possible double counting of GE's</td>
<td>10</td>
<td>10</td>
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<tr>
<td>Degree Total</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

*SCIGETC - special GE for STEM

Note: Some UC campuses now require calculus-based physics for biology majors and other particular courses. If you are planning to transfer to a UC campus, contact their admissions office for advice.
Human Biology
Associate of Science Degree

Courses required for the Human Biology Associate of Science degree include biology and chemistry courses necessary for transfer to allied health programs such as nursing, physical therapy, Physician Assistant, and radiology. Please refer to the Suggested Program information and check with a counselor concerning specific degree requirements to specific programs and transfer institutions. Please note that many of the courses have prerequisites that are best taken in the appropriate order to ensure success. Students transferring to a four-year institution for a Bachelor of Science in Biology generally take the CHEM B1A, B1B sequence.

Requirements for the Associate of Science Degree
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Biology - General Biology Associate in Science degree. To Transfer Coursework A minimum of 18 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
The successful student will be able to:
• identify medical problems and apply appropriate and effective solutions.
• analyze a clinical situation using anatomical terminology, select the correct technology to use for further examination, analyze and determine a diagnosis when a pathology is described, create a plan of action.
• demonstrate proficiency using a microscope.

Career Opportunities:
Nursing, physical therapy, medical technologist, and physician assistant.

Total Units: 18

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B32</td>
<td>Human Anatomy and Physiology I</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B33</td>
<td>Human Anatomy and Physiology II</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B16</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Electives — Select 5 units from the following:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B21</td>
<td>Special Projects in Biology</td>
<td>1.0</td>
</tr>
<tr>
<td>CHEM B2A</td>
<td>Introductory General Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM B11</td>
<td>Introduction to General, Organic, and Biochemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1A</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1B</td>
<td>General Chemistry and Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>MEDS B60</td>
<td>Medical Terminology</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR B10</td>
<td>Elementary Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: Students transferring for a Bachelor of Science in Nursing should consult the university of choice as to which chemistry sequence meets transfer needs.
Business Administration

Degrees
Business Administration, Associate of Science for Transfer
Accounting, Associate of Arts
Administrative Office Assistant, Associate of Arts

Certificates
Bookkeeping, Certificate of Achievement
Office Assistant, Certificate of Achievement
Retail Management, Certificate of Achievement

General Business, Job Skills Certificate
Office Assistant, Job Skills Certificate
Business Administration
Associate of Science for Transfer

The Associate in Science in Business Administration for Transfer degree (AS-T in Business Administration) is designed to provide students a clear transfer pathway to the CSU business administration major and completion of the business administration baccalaureate degree, to grant guaranteed admission to a CSU to a similar major with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units. The Associate of Science in Business Administration for Transfer degree provides a study of key business concepts. Business Administration majors will be able to analyze business scenarios and use numerical, graphical, symbolic, and verbal representations to effectively solve problems and communicate those solutions. Business Administration majors will be able to communicate economic effects, effectively convey financial information, and explain social, political, and ethical implications of business decision-making.

To Transfer Coursework
A minimum of 26 semester units in the major with a grade of 'C' or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Requirements for the Associate of Arts Degree for Transfer:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.

To Transfer Coursework
A minimum of 26 semester units in the major with a grade of 'C' or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
Upon successful completion, the student will be able to:
• The obtainment of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Program Learning Outcomes
Upon successful completion, the student will be able to:
• analyze a business scenario and use numerical, graphical, symbolic, and verbal representations to effectively solve problems and communicate those solutions.
• analyze a business scenario and correctly prepare financial statements to effectively convey financial information for management decision-making.
• analyze a business scenario using the tools of economic theory to communicate economic effects on business decision making.
• analyze a business scenario and appropriately apply computer information systems and business concepts to designing and managing business documents.
• analyze a business scenario and effectively explain the social, political and ethical implications of the law to actual and hypothetical business transactions.

Total Units: 26-27

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B2</td>
<td>Managerial Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B18</td>
<td>Business Law</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B1</td>
<td>Principles of Economics- Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Economics- Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

List A (Select 3-4 units from the following)
<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B2</td>
<td>Basic Functions and Calculus for Business</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B23</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B (Select 3 units from the following)
<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Category
Units in Major                        26.0-27.0
CSU GE Breadth                        37.0-39.0
Possible double counting of GE's      9.0
Degree Total                          60.0
Accounting
Associate of Arts

An Accounting degree provides students with the knowledge and skills necessary for employment and growth in the accounting profession. Using the language of business, accountants assemble and analyze, process, and communicate essential information about financial operations.

To Achieve the Associate in Arts
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Accounting Associate in Arts degree.

Program Learning Outcomes
Upon successful completion, the student will be able to:
- analyze and record financial transactions in a manual or computerized general ledger system.
- prepare financial statements; analyze and prepare financial information for management decision making.
- utilize current income tax resources to prepare personal income tax returns.
- communicate financial information effectively within a business environment.
- process payroll transactions in accordance with current payroll reporting requirements.

Total Units: 30.5
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B53A</td>
<td>Introduction to Accounting 1</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53B</td>
<td>Introduction to Accounting 2</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B54</td>
<td>Payroll Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B55</td>
<td>Computer Accounting Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B40</td>
<td>Personal Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B51</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B264</td>
<td>Ten-Key Proficiency</td>
<td>0.5</td>
</tr>
<tr>
<td>BSAD B18</td>
<td>Business Law</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations and People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: BSAD B1 may be substituted for BSAD B53A and BSAD B53B.

Administrative Office Assistant
Associate of Arts

The Administrative Office programs are designed to provide the skills and competencies needed to become an efficient, productive member of an office support team. Courses are designed to help students learn to analyze and coordinate office duties and systems, develop proficiency in the use of integrated software, and improve oral and written communication. Emphasis is placed on non-technical as well as technical skills. Students have the option of completing certificates and/or a two-year degree program. Designed to prepare the student for employment as office support staff to assist managers, executives, and professionals.

To Achieve the Associate in Arts
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Administrative Office Assistant Associate in Arts degree.

Program Learning Outcomes
Upon successful completion, the student will be able to:
- interact effectively in oral and written communication.
- participate in office related work experience to achieve the following desirable job qualities:
  - function as a team member.
  - demonstrate interpersonal skills on the job.
  - manage multi-tasks efficiently.
  - model professional and ethical behaviors.
  - identify soft skills such as being on time.
- demonstrate minimum acceptable skills in ten-key, keyboarding, and document processing.
- demonstrate minimum filing competencies.

Total Units: 30-32
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B252A,B,C</td>
<td>Computer Keyboarding, Parts 1-2-3</td>
<td>3.0</td>
<td>(3 Courses, 1 unit each)</td>
</tr>
<tr>
<td>BSAD B253A,B,C</td>
<td>Document Processing, Part 1-2-3</td>
<td>3.0</td>
<td>(3 Courses, 1 unit each)</td>
</tr>
<tr>
<td>BSAD B287</td>
<td>Filing</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>BSAD B85/B285</td>
<td>Business English</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>BSAD B88</td>
<td>Office Procedures</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations and People Skills</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>BSAD B264</td>
<td>Ten-Key Proficiency</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>BSAD B53A</td>
<td>Introduction to Accounting</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>BSAD B280</td>
<td>Machine Transcription</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>or BSAD B48WE</td>
<td>Occupational Work Experience Education</td>
<td>1-3.0</td>
<td></td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>BSAD B65</td>
<td>Principles of Organizational Communication</td>
<td>3.0</td>
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</tr>
</tbody>
</table>
**Bookkeeping Certificate of Achievement**

The Bookkeeping program provides students with the knowledge and skills necessary for employment and growth in the accounting profession. Using the language of business, accountants assemble and analyze, process, and communicate essential information about financial operations.

To Achieve the Certificate of Achievement

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Bookkeeping Certificate of Achievement.

**Program Learning Outcomes**

Upon successful completion, the student will be able to:

- analyze and record financial transactions in a manual or computerized general ledger system.
- prepare financial statements; analyze and prepare financial information for management decision-making.
- utilize current income tax resources to prepare personal income tax returns.
- communicate financial information effectively within a business environment.
- process payroll transactions in accordance with current payroll reporting requirements.

**Total Units: 25.5**

**Required Courses**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B53A</td>
<td>Introduction to Accounting 1</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B53B</td>
<td>Introduction to Accounting 2</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B54</td>
<td>Payroll Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B55</td>
<td>Computer Accounting Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B51</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B264</td>
<td>Ten-Key Proficiency</td>
<td>0.5</td>
</tr>
<tr>
<td>BSAD B252A</td>
<td>Computer Keyboarding, Part 1</td>
<td>1.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations and People Skills</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Office Assistant Certificate of Achievement**

An Office Assistant Certificate of Achievement increases the student’s employability as office support staff.

To Achieve the Certificate of Achievement

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Office Assistant Certificate of Achievement.

**Program Learning Outcomes**

Upon successful completion, the student will be able to:

- interact effectively in oral and written communication.
- participate in office related work experience to achieve the following desirable job qualities:
  - function as a team member.
  - demonstrate interpersonal skills on the job.
  - manage multi-tasks efficiently.
  - model professional and ethical behaviors.
  - identify soft skills such as being on time.
- demonstrate minimum acceptable skills in ten-key, keyboarding, and document processing.
- demonstrate minimum filing competencies.

**Total Units: 27-29**

**Required Courses**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD B252A,B,C</td>
<td>Computer Keyboarding, Parts 1-2-3 (3 Courses, 1 unit each)</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B253A,B,C</td>
<td>Document Processing, Part 1-2-3 (3 Courses, 1 unit each)</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B287</td>
<td>Filing</td>
<td>1.5</td>
</tr>
<tr>
<td>BSAD B288/B285</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B264</td>
<td>Ten-Key Proficiency</td>
<td>0.5</td>
</tr>
<tr>
<td>BSAD B53A</td>
<td>Introduction to Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B5</td>
<td>Human Relations and People Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B88</td>
<td>Office Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B280</td>
<td>Machine Transcription</td>
<td>1.5</td>
</tr>
<tr>
<td>WEXP B248</td>
<td>Occupational Work Experience Education</td>
<td>1-3.0</td>
</tr>
<tr>
<td>BSAD B20</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Retail Management
Certificate of Achievement

A Certificate of Achievement in Retail Management is designed to prepare students for entry-level employment. The Certificate will provide the student with broad-based knowledge and skills in retailing including grocery chains. This foundation can be built into many successful careers. The certificate is approved by members of the Western Association of Food Chains, all the major supermarket chains in the western 13 states. It encompasses several business essentials, including the soft skills of management and communication required for career success in the retail food industry.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Retail Management Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will be able to:
• perform the duties of a supervisor or middle level manager.
• analyze and record financial transactions in a manual or computerized general ledger system.
• effectively communicate within an organization in both written and oral media.
• make legal and ethical decisions that achieve organizational objectives.

Total Units: 30-31
Required Courses
Course #     Name                               Units
COMM B1     Public Speaking                     3.0
COMM B7     Organizational Communication       3.0
or
BSAD B65    Principles of Organizational       3.0
            Communication
BSAD B51    Business Mathematics               3.0
COMP B5     Introduction to Microsoft Office    3.0
BSAD B9     Fundamentals of Marketing          3.0
BSAD B43    Principles of Management           3.0
BSAD B90    Fundamentals of Retailing          3.0
BSAD B5     Human Relations and People Skills   3.0
BSAD B61    Human Resources Management         3.0
BSAD B53A   Introduction to Accounting 1        3.0
or
BSAD B1     Financial Accounting                4.0

General Business
Job Skills Certificate

A Job Skills Certificate in General Business will provide the student with broad-based knowledge and skills in business. These core classes provide the foundation for a variety of successful careers in business.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a General Business Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will be able to:
• analyze and record financial transactions in a manual or computerized general ledger system.
• perform the duties of a supervisor or middle level manager.
• effectively communicate within an organization in both written and oral media.
• make legal and ethical decisions that achieve organizational objectives.

Total Units: 12
Required Courses
Course #     Name                               Units
BSAD B5     Human Relations and People Skills  3.0
BSAD B20    Introduction to Business           3.0
COMP B5     Introduction to Microsoft Office   3.0
BSAD B53A   Introduction to Accounting 1       3.0
or
BSAD B1     Financial Accounting                4.0
Office Assistant
Job Skills Certificate

This certificate prepares students as entry-level office support staff. Students are urged to continue beyond the Job Skills Certificate and earn a Certificate of Achievement or Associate of Arts degree.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Office Assistant Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will be able to:
- interact effectively in oral and written communication.
- participate in office related work experience to achieve the following desirable job qualities:
  - function as a team member.
  - demonstrate interpersonal skills on the job.
  - manage multi-tasks efficiently.
  - model professional and ethical behaviors.
  - identify soft skills such as being on time.
- demonstrate minimum acceptable skills in ten-key, keyboarding, and document processing.
- demonstrate minimum filing competencies.

Total Units: 11

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3 Courses, 1 unit each)</td>
<td>BSAD B252</td>
<td>Filing</td>
<td>1.5</td>
</tr>
<tr>
<td>BSAD B85/B285, Business English</td>
<td>BSAD B85</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5, Introduction to Microsoft Office</td>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>BSAD B264, Ten-Key Proficiency</td>
<td>BSAD B264</td>
<td>Ten-Key Proficiency</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Chemistry

Degree
Chemistry, Associate of Science Degree for Transfer
Chemistry, Associate of Science Degree
Chemistry

Associate of Science Degree for Transfer

The Associate of Science in Chemistry is an appropriate degree for students interested in transferring to a four-year university as a major in the sciences. This major will provide students with a full two years of chemistry education as well as a solid foundation in math and physics. Additionally, the degree provides the student employment opportunities within local industries as a laboratory technician.

Career opportunities in Chemistry for transfers are varied and broad, ranging from all chemical industries, physics, all other areas of the physical sciences, engineering, and all areas of the biological and environmental sciences and allied health fields including medicine. Examples of local industries include: agriculture, geo- and petrochemical businesses, analytical services and laboratories.

The AS-T degree offered is designed specifically for the California State University system. As suggested below, transfer to other colleges or universities may require additional courses; students must be sure to speak with completion advisors if they have any intentions of transferring to one of these other schools.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including the following:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.
• The obtaining of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a 'C' or better. A 'P' (Pass) grade is not acceptable for courses in the major.

The Associate of Science for Transfer (“AS-T”) Degree in Chemistry provides a pathway to students who are pursuing a career in the chemical-related sciences. This may be a position at a local industry’s analytical, petroleum, or medical laboratory; or transfer to a CSU in the field of chemistry, biochemistry, other related sciences (biology/medicine); or perhaps a career in secondary teaching; or satisfying the needs of various disciplines within engineering. It serves the diverse needs of students who wish to obtain a strong understanding of the chemical sciences. In particular, the AS-T Degree in Chemistry allows students to learn the fundamental principles and practices of chemistry in order to create a solid foundation for their future personal, academic, or vocational endeavors. The AS-T Degree in Chemistry truly provides a solid preparation that is appropriate for a variety of scientific disciplines.

Students transferring to a CSU campus that accepts the AS-T Degree in Chemistry will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system (though many of those find it fully satisfies their requirements). Students should consult with an advisor/counselor when planning to complete the degree for more information on university admission and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

Program learning outcomes
Upon successful completion, the student will:
• The student shall be able to apply logical quantitative and qualitative reasoning in solving problems.
• The student shall be able to apply the methodologies of chemistry when approaching a problem.
• The student shall demonstrate a knowledge of and recognize the processes that explain natural chemical phenomena.

Total Units: 36

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1A</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1B</td>
<td>General Chemistry and Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B30A</td>
<td>Organic Chemistry for Science Majors, I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B30B</td>
<td>Organic Chemistry for Science Majors, II</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6A</td>
<td>Analytic Geometry/Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6B</td>
<td>Analytic Geometry/Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4A</td>
<td>Mechanics and Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4B</td>
<td>Heat, Electricity, and Magnetism</td>
<td>4.0</td>
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Category

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CSU GE Breadth</td>
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</tr>
</tbody>
</table>

Note: The CSU GE Breadth pattern is not an option for students to complete this degree within 60 units because double counting is capped at 7 units maximum. Students must use the IGETC for STEM which allows students to take one Arts or Humanities course and one Social or Behavioral Science course after transfer.
Recommended Sequence

**Semester 1**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1a</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6a</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL B1a</td>
<td>Expository Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH B1</td>
<td>Physical Anthropology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Semester 2**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1B</td>
<td>General Chemistry and Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL B2</td>
<td>Advanced Composition and Critical Thinking</td>
<td>4.0</td>
</tr>
<tr>
<td>PHIL B9</td>
<td>Critical Thinking and Advanced Composition</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Art or Humanities elective</td>
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</tr>
</tbody>
</table>

**Semester 3**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B30A</td>
<td>Organic Chemistry for Science Majors, I</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYS B4A</td>
<td>Mechanics and Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Art or Humanities elective</td>
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</table>

**Semester 4**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CHEM B30B</td>
<td>Organic Chemistry for Science Majors, II</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYS B4B</td>
<td>Heat, Electricity, Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Art or Humanities elective</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Art or Humanities elective</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Chemistry
Associate of Science Degree

The Associate of Science in Chemistry is appropriate for students interested in transferring to a four-year university as a major in the sciences. The major will provide students with a complete general education in math and core physical sciences as well as an introduction to some basic computer systems skills. Additionally, the degree provides the student employment opportunities within local industries as a laboratory technician. Career opportunities in Chemistry for transfers, are varied and broad, ranging from all chemical industries, physics, all other areas of the physical sciences, engineering, and all areas of the biological sciences and allied health fields. Examples of local industries include: agriculture, geo and petrochemical businesses, analytical services and laboratories.

To Achieve the Associate in Science

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Chemistry Associate in Science degree.

Program Learning Outcomes

Upon successful completion, the student will:

• demonstrate a knowledge of and recognize the processes that explain natural phenomena.
• apply the methodologies of science when approaching a problem.
• apply logical quantitative and qualitative reasoning in solving problems.

Total Units: 38

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM B1A</td>
<td>General Chemistry II</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B1B</td>
<td>General Chemistry &amp; Chemical Analysis</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM B18</td>
<td>Elementary Organic Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH B6A</td>
<td>Analytic Geometry/Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6B</td>
<td>Analytic Geometry/Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6C</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select 8 Units from the following:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS B4A</td>
<td>Mechanics and Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4B</td>
<td>Heat, Electricity, Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2A</td>
<td>General Physics-Mechanics &amp; Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2B</td>
<td>General Physics-Sound, Light, Electricity, Magnetism, Modern Physics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS B4C</td>
<td>Optics &amp; Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B3B</td>
<td>General Biology II</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL B16</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Note: BIOL B3B no longer has BIOL B3A as prerequisite.

The courses in physics (PHYS B4A, B4b, B4c), math (MATH B6A through MATH B6C) and chemistry (CHEM B1A and B1B) are required as preparation for the major in chemistry at most transfer colleges and universities. See www.assist.org for specific major preparation courses for the CSUs and UCs. Two courses in English composition (ENGL B1A and ENGL B2 or PHIL B9) as well as general education courses are also required. Please consult with a counselor for more specific information and study the catalog of the senior institution to which you intend to transfer.
Child Development

**Degrees**
Early Childhood Education, Associate of Science for Transfer
Elementary Teacher Education, Associate of Arts for Transfer

**Certificates**
Child Development Master Teacher-Infant/Toddler, Certificate of Achievement
Child Development Master Teacher-Special Education, Certificate of Achievement
Child Development Teacher, Certificate of Achievement
Child Development Associate Teacher, Job Skills Certificate
Child Development Assistant Teacher, Job Skills Certificate
Early Childhood Education

Associate of Science Degree for Transfer

Career Technology Education (CTE) and Transfer Degree

due to a continued increase of parents in the labor force, there is an increased demand for child care workers and early childhood educators. The most recent California Child Care Portfolio (2015) indicates 63% of children aged 0-12 have parents in the labor force, but there is not enough child care centers or homes to meet child care needs. In Kern County there was an increase of 10% for subsidized child care while California overall had an increase of 1%.

The Associate in Science in Early Childhood Education for Transfer degree is designed to train students to work in a variety of early childhood settings. The two-year program primarily serves students desiring an early childhood background, supervised student teaching experience and fulfillment of academic requirements for a Child Development Teacher Permit. Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Associate in Science in Early Childhood Education for Transfer. This degree prepares students for seamless transfer to a CSU.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Program Learning Outcomes
Upon successful completion, the student will be able to:
- demonstrate an understanding of developmentally appropriate curriculum and explain principles and practices pertaining to child development.
- explain topics concerning the child, family, and community, and will be able to demonstrate pediatric CPR and first aid.
- compose observations and assessments, compare and contrast the development of children on children from infancy to adolescents considering culture and typical and atypical needs.
- demonstrate an understanding of the needs of infant/ toddler and children with special needs, according to their mastery specialization. The master teacher will be able to design a care plan for the needs of infant and toddlers or special education children commensurate to their specialization.

Total Units: 24

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B21</td>
<td>Child Growth and Development: Birth Through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B22</td>
<td>Observation and Assessment: Birth Through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B32</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B41</td>
<td>Supervised Field Experience in Early Childhood Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B42</td>
<td>Child, Family, and Community</td>
<td>3.0</td>
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<tr>
<td>CHDV B49</td>
<td>Child Health, Safety and Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Category

<table>
<thead>
<tr>
<th>Units in Major</th>
<th>CSU</th>
<th>IGETC</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>39</td>
<td>37</td>
</tr>
<tr>
<td>Possible double counting of GE’s</td>
<td>6</td>
<td>3</td>
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<tr>
<td>Degree Total</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>
Elementary Teacher Education  
Associate of Arts for Transfer

The Associate in Arts in Elementary Teacher Education for Transfer degree is designed to prepare students for transfer to a California State University traditional or integrated teacher preparation program. The Associate in Arts in Elementary Teacher Education for Transfer degree incorporates the elementary subject matter competence requirements as established by the California Teacher Credentialing Commission and prepares students for the California Subject Examinations for Teachers (CSET) Multiple Subjects exam. Additionally, the degree may also serve as preparation for paraprofessional positions in the K-12 classroom, meeting unit requirements for paraprofessionals as established by the No Child Left Behind Act.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Total Units: 60

**Required Courses**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>CHDV B21</td>
<td>Child Growth and Development: Birth through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC B24</td>
<td>Early Field Experience for Elementary Teachers</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B1A</td>
<td>Expository Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B1B</td>
<td>Introduction to Types of Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ERSC B10</td>
<td>Introduction to Earth Science</td>
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<td>ERSC B10L</td>
<td>Earth Science Laboratory</td>
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<td>GEOG B5</td>
<td>World Regional Geography</td>
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<tr>
<td>HIST B1</td>
<td>World History from the Origins of Civilizations to 1600</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B17A</td>
<td>History of the United States</td>
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</tr>
<tr>
<td>MATH B4A</td>
<td>Mathematics for Elementary School Teaching</td>
<td>4.0</td>
</tr>
<tr>
<td>PHSC B12</td>
<td>Physical Science</td>
<td>4.0</td>
</tr>
<tr>
<td>POLS B1</td>
<td>American Government: National, State and Local</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Program Learning Outcomes**
Upon successful completion, the student will be able to:
- evaluate elements of diversity and diverse learning styles in student populations.
- analyze how teachers and schools can promote learning for all students.
- demonstrate proficiency in 14 content areas required for subject matter competency for elementary teachers.

**List A (select 4 units from the following)**
- ENGL B3 Argumentative Writing and Critical Thinking Through Literature 4.0
- PHIL B9 Critical Thinking and Advanced Composition 4.0

**List B (select 3 units from the following)**
- ART B1 Art Appreciation 3.0
- MUSC B22 Music Appreciation 3.0
- THEA B20 Introduction to Theatre 3.0

**List C (select 3 units from the following)**
- COMP B2 Introduction to Computer Information Systems 3.0
- HIST B18 History of California 3.0

**Category**
- Units in Major 60.0
- Degree Total 60.0
Child Development Master Teacher - Infant Toddler Certificate of Achievement

The Certificate of Achievement for Child Development Master Teacher - Infant Toddler may be earned by taking the 27 units of child development courses required for the Child Development Teacher Certificate of Achievement and the following courses.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Child Development Master Teacher - Infant Toddler Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will be able to:
• articulate 12 units with California State University, Bakersfield.
• acquire a teacher permit from the Commission on Teacher Credentialing.
• meet all requirements for the Associate in Science degree in the major.
• receive a job as a master teacher in a publicly funded or private child development program.
• have a pediatric CPR and First Aid certification.

Total Units: 35
Required Courses (completion of the Child Development Teacher Certificate of Achievement plus the following)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B13C</td>
<td>Child Growth and Development: The Infant Toddler Years</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B52</td>
<td>Care of Infants and Toddlers with Disabilities</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B53A</td>
<td>Early Childhood Education: Adult Supervision</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Child Development Master Teacher - Special Education Certificate of Achievement

The Certificate of Achievement for Child Development Master Teacher - Special Education may be earned by taking the 27 units of child development courses required for the Child Development Teacher Certificate of Achievement and the following courses.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Child Development Master Teacher - Special Education Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will be able to:
• articulate 12 units with California State University, Bakersfield.
• acquire a Master Teacher permit from the Commission on Teacher Credentialing.
• meet all requirements for the Associate in Science degree in the major.
• receive a job as a master teacher in a publicly funded or private child development program.
• have a pediatric CPR and First Aid certification.

Total Units: 35
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B33</td>
<td>Survey of Special Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B52</td>
<td>Care of Infants and Toddlers with Disabilities</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B53A</td>
<td>Early Childhood Education: Adult Supervision</td>
<td>2.0</td>
</tr>
<tr>
<td>CHDV B21</td>
<td>Child Growth and Development: Birth Through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B22</td>
<td>Observation and Assessment: Birth Through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B32</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B40</td>
<td>Creative Art, Movement, and Music Activities for Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B42</td>
<td>Child, Family and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B49</td>
<td>Child Health, Safety and Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B41</td>
<td>Supervised Field Experience in Early Childhood Education</td>
<td>3.0</td>
</tr>
</tbody>
</table>
### Child Development Teacher Certificate of Achievement

This course work meets the Child Development requirements for the Child Development Teacher Permit. Students may apply for the Permit at the Kern County Superintendent of Schools, Office of Credentials, 661/636-4750 or 661/636-4751. Students must also meet the General Education requirement and Experience requirement in accordance with the California Commission on Teacher Credentialing.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Child Development Teacher Certificate of Achievement.

**Program Learning Outcomes**
Upon successful completion, the student will be able to:
- articulate 12 units with California State University, Bakersfield.
- acquire a teacher permit from the State of California Teacher Commission.
- meet all requirements for the Associate in Science degree in the major.
- be employable as a teacher in publicly funded or private child development programs.
- have pediatric CPR and First Aid certification

**Total Units: 27**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B21</td>
<td>Child Growth and Development: Birth Through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B22</td>
<td>Observation and Assessment: Birth Through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B32</td>
<td>Teaching in a Diverse Society: Birth Through Adolescence</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B40</td>
<td>Creative Art, Movement, and Music Activities for Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B42</td>
<td>Child, Family and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B49</td>
<td>Child Health, Safety and Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Child Development Associate Teacher Job Skills Certificate

This course work meets the requirements for the Child Development Associate Teacher Permit. This course work also meets the Child Development requirements for a fully qualified teacher in a licensed Preschool Child Development Center or School-Age Center.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Child Development Associate Teacher Job Skills Certificate.

**Program Learning Outcomes**
Upon successful completion, the student will be able to:
- articulate 12 units with California State University, Bakersfield.
- be employable as an associate teacher in a publicly funded or private child development program.
- have pediatric CPR and First Aid certification.

**Total Units: 12**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B42</td>
<td>Child, Family and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B49</td>
<td>Child Health, Safety and Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Child Development Assistant Teacher
Job Skills Certificate

This course work meets the requirements for the Child Development Assistant Teacher Permit. Career opportunities in Child Development include Assistant Child Development Teacher.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Child Development Assistant Teacher Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will be able to:
• demonstrate a developmentally appropriate curriculum.
• be employable as an assistant teacher in a private child development program.

Total Units: 6
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDV B36</td>
<td>Developmentally Appropriate Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B20</td>
<td>Principles and Practices</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Communication

Degree
Communication Studies, Associate of Arts for Transfer

Certificate
Communication, Certificate of Achievement
Communication Studies

Associate of Arts Degree for Transfer

The Associate in Arts in Communication Studies for Transfer is intended for all students who plan to complete an AA in Communication studies. This degree is especially valuable for those students planning on completing a bachelor’s degree in Communication or a similar major at a CSU campus because the Associate in Arts in Communication Studies for Transfer guarantees admission to the CSU system (but not to a particular campus or major).

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including the following:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.
• The obtainment of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Students transferring to a CSU campus that does accept the Associate in Arts in Communication Studies for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated high-unit major).

This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. No additional graduation requirements are required to complete this degree.

The Associate in Arts in Communication Studies for Transfer equips students with relational and presentation skills that provide a foundation for success throughout students’ educational careers, business careers and personal interactions. Students learn about verbal and nonverbal channels of communication that inform, persuade, manage, interpret, direct, or influence social interaction in diverse contexts. The degree introduces students to both established and contemporary theories of human communication pertaining to societal construction, maintenance, and perpetuation of acceptable patterns of communicative conduct. Students choosing this degree also acquire pragmatic communication skills enabling them to competently navigate social interaction within interpersonal, small group, public, organizational, and intercultural contexts. Students learn field-specific nomenclature as well as effective oral, listening, and critical thinking skills needed to successfully manage communication encounters in a variety of professional and personal environments. Students will be prepared in this lower division work for a baccalaureate degree in Communication Studies, Speech Communication, or a similar degree.

To Achieve the Associate in Arts for Transfer
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Communication Studies Associate in Arts for Transfer degree.

To Transfer Coursework
A minimum of 18 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
Upon successful completion, the student will:
• construct, use, and interpret messages across multiple channels to inform, persuade, manage, negotiate, relate, and generally influence each other within and across varying cultural venues.
• identify and value disparate systems of social norms and values that influence the human communicative process. Understand the various theoretical and pragmatic skills that enable them to navigate social interaction within multiple interpersonal, small group, public, and intercultural contexts.
• become familiar with both field-specific nomenclature as well as effective oral, listening, and critical thinking skills.

Total Units: 18

Required Courses (*Courses with an asterisk can be double counted for General Education)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B1*</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Group A - Select 6 units from the following:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B2*</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B5*</td>
<td>Rhetoric and Argumentation</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B8*</td>
<td>Small Group Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Group B (Select 6 units from the following or any Group A course not used)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B4*</td>
<td>Persuasive Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B6*</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B7*</td>
<td>Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B21</td>
<td>Oral Interpretation</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Group C (Select 3 units from any Group A or B course not used)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B9</td>
<td>Health Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B10</td>
<td>Leadership and Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B2</td>
<td>Advanced Composition and Critical</td>
<td>4.0</td>
</tr>
<tr>
<td>JRNL B1</td>
<td>Media and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B2</td>
<td>Beginning Reporting</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1A</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Category

Units in Major                   18.0
CSU GE Breadth                   39.0
Degree Total                     60.0
Communication
Certificate of Achievement

The Communication Certificate is designed to enhance a student's ability to communicate in social, professional, and relational contexts. This certificate is intended to enhance the communication skills of students from all majors and career plans. Students are required to take four classes for a total of twelve units.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a 'C' grade in each course, the student will be awarded a Communication Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• construct, use, and interpret messages across multiple channels to inform, persuade, manage, negotiate, relate, and generally influence each other within and across varying cultural venues.
• identify and value disparate systems of social norms and values that influence the human communicative process.
• understand the various theoretical and pragmatic skills that enable them to navigate social interaction within multiple interpersonal, small group, public, and intercultural contexts.
• become familiar with both field-specific nomenclature as well as effective oral, listening, and critical thinking skills.

Total Units: 12
Required Courses (select 12 units from the following)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B2</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B4</td>
<td>Persuasive Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B5</td>
<td>Rhetoric and Argumentation</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B6</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B7</td>
<td>Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B8</td>
<td>Small Group Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B10</td>
<td>Leadership and Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Computer Studies

Degree
Computer Science, Associate of Science for Transfer

Certificate
CompTIA, Certificate of Achievement
Computer Science
Associate of Science Degree for Transfer

The Associate in Science in Computer Science for Transfer degree (AS-T in Computer Science) is designed to provide students a clear transfer pathway to the CSU computer science major and completion of the computer science baccalaureate degree, to grant guaranteed admission to a CSU to a similar major, with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units. Students will take courses in computer science and related fields that will provide the theoretical and practical knowledge necessary to work in a variety of computer related fields such as Software Engineering, Computer Engineering, Computer Systems Analysis, Network Engineering, Cloud Computing, Mobile Application Development, Computer Support, Computer Information Systems, Database Administration, Network Security, and Web Development.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including the following:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.
• The attainment of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Program Learning Outcomes
Upon successful completion, the student will:
• identify the appropriate software development technologies, algorithms, and scientific and mathematical principles to apply to a given program.
• effectively design and implement programming constructs, including functions, control structures, arrays/lists, classes and objects for a given programming problem.
• effectively implement the appropriate data structures using the principles and techniques of object-oriented programming for a given programming problem.

Total Units: 28

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP B11</td>
<td>Programming Concepts and Methodologies</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B12</td>
<td>Programming Concepts II</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B13</td>
<td>Computer Architecture &amp; Organization</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B14</td>
<td>Discrete Structures</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6A</td>
<td>Analytic Geometry/Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6B</td>
<td>Analytic Geometry/Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4A</td>
<td>Mechanics and Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4B</td>
<td>Heat, Electricity, Magnetism</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Optional Courses (select 6 units from the following):

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B10</td>
<td>Introduction to Programming Methodologies using Python</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B11</td>
<td>Programming Concepts and Methodologies I</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B21</td>
<td>Database Systems – Design &amp; Structured Query Language (SQL)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 37.0-39.0

Possible double counting of GE’s: 6.0-7.0

Degree Total: 60.0

CompTIA
Certificate of Achievement

The program curriculum prepares students interested in learning computer concepts and technologies; preparing them for employment in many areas of Information Technology. Each course in the program approaches topics in a vendor-neutral (more generalized) fashion so that they can easily be applied to specific industries. The curriculum is designed to support students seeking to pass CompTIA’s certification exams. CompTIA is an internationally recognized certification program for the information technology industry. Acquiring such certifications will assist students in finding employment in Information Technology and Computer infrastructure related fields.

Some of these fields include:
• Network and Systems Administrators
• Computer Network Architects
• Computer Network Support Specialists
• Computer Support Specialists
• Information Security Analysts
• Network and Computer Systems Administrators
• Information Security Analysts
• Computer Hardware Support

To Achieve the Certificate of Achievement
Upon successful completion of the core requirements with a ‘C’ grade or better in each course, the student will be awarded a CompTIA Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will demonstrate:
• an understanding of computer hardware and software terminologies and digital infrastructure troubleshooting techniques.
• the ability to install and administer Operating Systems.
• an understanding of networking infrastructure concepts and security.
• an understanding of those technologies that aid in the support of computer and communications infrastructures.

Total Units: 19

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP B31</td>
<td>CompTIA Network Security - Security+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B32</td>
<td>CompTIA Linux+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B33</td>
<td>CompTIA Networking Technologies - Network+</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B84</td>
<td>CompTIA A+</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Elective Courses (select 6 units from the following):

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B10</td>
<td>Introduction to Programming Methodologies using Python</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B11</td>
<td>Programming Concepts and Methodologies I</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B21</td>
<td>Database Systems – Design &amp; Structured Query Language (SQL)</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Construction

**Degree**
Industrial Technology, Construction Option, Associate of Science

**Certificate**
Construction Technology, Certificate of Achievement
Industrial Technology, Construction Option - Associate of Science Degree

The requirements for the Associate in Science Degree in Industrial Technology, Construction Option are intended to provide students with the opportunity to develop and blend the critical thinking skills along with the technical construction skills necessary to supervise or construct structures within the residential building profession. Course work within the construction program is designed to assist students in defining their respective career paths within the diverse and challenging construction profession. Course emphasis is placed on blending technical skill development, industrial safety with practical lab activities. Students can obtain these courses from within the Construction Technology area and from the various related disciplines (architecture, industrial drawing, industrial technology and wood technology). To complement the individual student’s academic and technical growth, students complete required General Education courses. Students working toward this degree are also encouraged to apply for the Construction Technology Certificate of Achievement.

Program Learning Outcomes
The successful student will be able to:
• demonstrate proficiency in technical skills and safety principles required for employment in the construction industry.
• demonstrate program solving skills used in the construction industry.
• demonstrate a deep understanding of the core material required for certification in construction technologies.

Career Opportunities:
Construction Worker, Construction Manager.

Total Units: 27

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B6</td>
<td>Materials of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B55</td>
<td>Residential Building Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B2</td>
<td>Estimating and Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness (or equivalent)</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B50A</td>
<td>Residential Construction</td>
<td>7.0</td>
</tr>
<tr>
<td>or</td>
<td>CNST B50B</td>
<td>7.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Electives</td>
<td>- for a total of at least 27 units</td>
<td></td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B56</td>
<td>Building and Related Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B6</td>
<td>Materials of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B56</td>
<td>Commercial Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B1AB</td>
<td>Introduction to Automotive Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B50</td>
<td>Modern College Arithmetic and Pre-Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B1A</td>
<td>Introduction to the Welding Process</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Construction Technology Certificate of Achievement

The requirements for the Construction Technology Certificate of Achievement are intended to provide students with the opportunity to develop skills and knowledge to enter into the diverse residential construction field. So each student can explore and design their respective career path, emphasis is placed on blending technical skill development, industrial safety with practical lab activities. Students can obtain these courses from within the Construction Technology area and from the various related disciplines (architecture, industrial drawing, industrial technology and wood technology).

Program Learning Outcomes
The successful student will be able to:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university degree program or for certification in the department programs.

Career Opportunities:
Construction Worker, Construction Manager.

Total Units: 27

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH B55</td>
<td>Residential Building Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B2</td>
<td>Estimating and Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness (or equivalent)</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B50A</td>
<td>Residential Construction</td>
<td>7.0</td>
</tr>
<tr>
<td>or</td>
<td>CNST B50B</td>
<td>7.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Electives</td>
<td>- for a total of at least 27 units</td>
<td></td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B56</td>
<td>Building and Related Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B6</td>
<td>Materials of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH B56</td>
<td>Commercial Codes</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B1AB</td>
<td>Introduction to Automotive Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B50</td>
<td>Modern College Arithmetic and Pre-Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B1A</td>
<td>Introduction to the Welding Process</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Correctional Administration

Degree
Correctional Administration, Associate of Arts
Correctional Administration
Associate of Arts Degree

This program includes classes that will guide students toward careers in law enforcement, the courts and the law, and state, local, and private corrections. These courses have been endorsed by the Joint Apprenticeship Committee of the California Department of Corrections, California Youth Authority, and the California Correctional Peace Officers Association.

To Achieve the Associate in Arts
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Correctional Administration Associate in Arts.

To Transfer Coursework
A minimum of 24 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
Upon successful completion, the student will:
• identify, analyze, and apply the fundamental theories and concepts underlying the American correctional system.
• identify and describe the operational elements of the major components comprising the American prison and jail systems.
• identify, analyze, and apply basic legal principles and rules to factual situations.
• identify and implement the principles and procedures utilized in legitimate scientific and criminal investigation.

• demonstrate multicultural awareness and respect for constitutional and human rights.
• identify, analyze, and apply the ethical components of discretionary decision-making in probation, parole, and institutional corrections.
• demonstrate respect for the dignity and humanity of victims, perpetrators, and wrongfully convicted persons.
• demonstrate the ability to communicate effectively orally and in writing.

Total Units: 21
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B21</td>
<td>Introduction to Correctional Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B50</td>
<td>Criminal Justice Report Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B60</td>
<td>Legal Aspects of Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B2</td>
<td>Criminal Law</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B12</td>
<td>Forensic and Scientific Aspects of Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B22</td>
<td>Institutional Treatment and Supervision of Offenders</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B23</td>
<td>Fundamentals of Interviewing &amp; Counseling</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B24</td>
<td>Probation, Parole and Community Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B5</td>
<td>Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B8</td>
<td>Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B9</td>
<td>The Juvenile Justice System</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives — Select 6 units from the following:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B22</td>
<td>Institutional Treatment and Supervision of Offenders</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B23</td>
<td>Fundamentals of Interviewing &amp; Counseling</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B24</td>
<td>Probation, Parole and Community Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B5</td>
<td>Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B8</td>
<td>Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B9</td>
<td>The Juvenile Justice System</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Criminal Justice

Degree
Criminal Justice, Associate of Arts
Criminal Justice
Associate of Arts Degree

This program includes classes that will guide students toward careers in law enforcement and policing, the courts and the law, and state, local, and private corrections.

To Achieve the Associate in Arts
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Criminal Justice Associate in Arts degree.

To Transfer Coursework
A minimum of 24 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
Upon successful completion, the student will:
- identify, analyze, and apply the fundamental theories and concepts underlying the American criminal justice system.
- identify and describe the operational elements of the major components comprising the American justice system.
- identify, analyze, and apply basic legal principles and rules to factual situations.

Total Units: 24

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B1</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B2</td>
<td>Criminal Law</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B3</td>
<td>Introduction to Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B4</td>
<td>Constitutional Criminal Procedure</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B12</td>
<td>Forensic and Scientific Aspects of Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B7</td>
<td>Criminal Profiling of Violent Offenders</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives - Select 6 units from the following:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM B5</td>
<td>Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B8</td>
<td>Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B9</td>
<td>The Juvenile Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B10</td>
<td>Organized Crime</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B24</td>
<td>Probation, Parole and Community Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B50</td>
<td>Criminal Justice Report Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Economics

Degree
Economics, Associate of Arts for Transfer
Economics

Associate of Arts Degree for Transfer

The Associate in Arts in Economics for Transfer Degree is designed to prepare students for transfer into the CSU system to complete a baccalaureate degree in Economics or a similar major. It is designed for students interested in preparing for advanced degrees in Economics, Business, or Law, and for those students concerned with the economic behavior of consumers, businesses, and governments. Economics majors have a wide variety of career opportunities in business, law, journalism, education, politics, finance and banking, government, public and private overseas service, and labor leadership. Many economics majors go on to pursue graduate study in a related professional area, such as law, business, or public administration.

The Associate in Arts in Economics for Transfer Degree is designed to provide students a clear pathway to the CSU economics major and completion of the economics baccalaureate degree, to grant guaranteed admission to a CSU to a similar major, with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.

Program Learning Outcomes
Upon successful completion, the student will:
- be able to explain the nature and functioning of the market system.
- be able to define criteria for assessing efficiency in the provision of goods and services.
- investigate and assess the operation of economic institutions.
- be able to evaluate alternative policies intended to enhance economic outcomes.
- develop competence in quantitative methods and computing methods.
- be able to conceptualize and analyze problems using the tools of economic theory and communicate the results.

Total Units: 20-22

<table>
<thead>
<tr>
<th>Category</th>
<th>Units in Major</th>
<th>CSU GE Breadth</th>
<th>Degree Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
<td></td>
<td>20.0-22.0</td>
</tr>
<tr>
<td>List A - Select 3-4 units from the following:</td>
<td></td>
<td></td>
<td>38-40.0</td>
</tr>
<tr>
<td>List B - Select 3-4 units from the following or any course(s) not used from List A:</td>
<td></td>
<td></td>
<td>60.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON B1</td>
<td>Principles of Economics-Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B2</td>
<td>Basic Functions and Calculus for Business or</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B23</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6B</td>
<td>Analytic and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B1</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BSAD B2</td>
<td>Managerial Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B2</td>
<td>Introduction to Computer Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6C</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6E</td>
<td>Elementary Linear Algebra</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Electronics

Degree
Industrial Technology, Electronics Option, Associate of Science

Certificates
Electronics Technology, Certificate of Achievement
Electronics - Industrial Automation, Job Skills Certificate
Electronics - Industrial Communication, Job Skills Certificate
Electronics - Industrial Maintenance, Job Skills Certificate
Electronics - Manufacturing Automation, Job Skills Certificate
**Industrial Technology, Electronics Option, Associate of Science**

Technology runs the planet, with electronics playing an essential role. It is a digital world, and those who understand this world can become valuable additions to technology-focused employers. The Industrial Technology Degree, Electronics Option, teaches essential skills that can be put to use as an industrial technician, electronics technician, field service representative, salesperson or computer technician. A degree holding student will also be looked at for quick promotions into supervision and management positions.

To Achieve the Associate in Science
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Industrial Technology, Electronics Option Associate in Science degree.

To Transfer Coursework
A minimum of 33 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

**Program Learning Outcomes**
The successful student will be able to:
- demonstrate proficiency in technical skills and safety principles required for employment in the electronics industry.
- demonstrate problem solving skills used in electrical design and product development.
- demonstrate a deep understanding of the core material required for certification in the electronics program.

**Total Units: 33**

**Required Courses**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B5</td>
<td>Programmable Logic Controllers</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B6</td>
<td>Analog and Digital Electronics</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B5A</td>
<td>Electric Motors-Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B56</td>
<td>Instrumentation &amp; Process Control</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B61</td>
<td>Telecommunications</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B62</td>
<td>Radio Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B70</td>
<td>Mechanical Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness -or equivalent-</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives - Select at least 4 units from the following:**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELET B4</td>
<td>Computer Integrated Manufacturing</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B63</td>
<td>Electronic Systems Installation</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B1A</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electronics Technology Certificate of Achievement**

The Bakersfield College Electronics Certificate program will show the world that you have gained the necessary knowledge and skills to perform better on the job. This program of study is widely recognized and modeled after local industry competency standards. A certified electronic professional often appears more dedicated, more skilled and thus more attractive to prospective employers. Program includes study in the following areas: Electrical theory and components, soldering, wiring diagrams, safety, advanced analog semiconductor and digital devices, power supplies, test equipment, programmable logic controllers, Allen Bradley SLC 500 and CLX 5000 Instrumentation, temperature, pressure, level detectors, radio communications, antenna and transmission lines, telecommunications, video, data, network technology, motor theory and wiring, computer integrated manufacturing, installation and wiring standards, and mechanical systems. Career opportunities in Electronics Technology include entry level positions in petroleum/energy, manufacturing automation, instrumentation/process control, logistics and distribution, ancillary services, telecommunications, radio communications, food and materials processing, and industrial maintenance.

**Program Learning Outcomes**
The successful student will be able to:
- demonstrate proficiency in technical skills and safety principles required for industrial employment.
- demonstrate a deep understanding of the core material required for transfer to a four year university degree program or for certification in the department programs.

**Career Opportunities:**
Industrial Maintenance Mechanic, Instrumentation Technician, Process Technician, Communications Technician, Controls Technician, Automation Technician

**Total Units: 33**

**Required Courses**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B5</td>
<td>Programmable Logic Controllers</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B6</td>
<td>Analog and Digital Electronics</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B5A</td>
<td>Electric Motors-Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B56</td>
<td>Instrumentation &amp; Process Control</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B61</td>
<td>Telecommunications</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B62</td>
<td>Radio Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B70</td>
<td>Mechanical Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness -or equivalent-</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Electives - select at least 4 units from the following**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELET B4</td>
<td>Computer Integrated Manufacturing</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B63</td>
<td>Electronic Systems Installation</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>ELET B58</td>
<td>Advanced Programmable Logic Controllers</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B1B</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>MFGT B1A</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Electronics, Industrial Automation
Job Skills Certificate

The Bakersfield College Electronics Certificate program will show the world that you have gained the necessary knowledge and skills to perform better on the job. This program of study is widely recognized and modeled after local industry competency standards. A certified electronic professional often appears more dedicated, more skilled and thus more attractive to prospective employers. Program includes study in the following areas: electrical theory and components, soldering, wiring diagrams, safety programmable logic controllers, Allen Bradley SLC 500 and CLX 5000 computer integrated manufacturing. This program prepares students for careers in electronics technology. Entry level positions in petroleum/energy, manufacturing automation, process control, logistics and distribution, material processing, and industrial maintenance.

Program Learning Outcomes
The successful student will be able to:
• demonstrate proficiency in automation programming/troubleshooting related to programmable logic controllers and safety principles required for industrial employment.
• demonstrate problem solving skills used in ladder logic and sequential function charts, to include design and development of programmable logic controllers circuits.
• demonstrate an understanding of the core material and theory related to programmable automation controllers that is required for transfer to a four year university degree program or for certification.

Career Opportunities:
Industrial Maintenance Mechanic, Instrumentation Technician, Process Technician, Controls Technician, Automation Technician

Total Units: 9
Required Courses
Course #        Name                          Units  
ELET B4        Computer Integrated Manufacturing 3.0  
ELET B5        Programmable Logic Controllers 3.0  
ELET B58       Advanced Programmable Logic Controllers 3.0  

Electronics, Industrial Communication
Job Skills Certificate

The Bakersfield College Electronics Certificate program will show the world that you have gained the necessary knowledge and skills to perform better on the job. This program of study is widely recognized and modeled after local industry competency standards. A certified electronic professional often appears more dedicated, more skilled and thus more attractive to prospective employers. Program includes study in the following areas: electrical theory and components, soldering, wiring diagrams, safety programmable logic controllers, analog semiconductor and digital devices, power supplies, test equipment, radio communications, antenna and transmission lines, telecommunications, video, data, network technology, and installation and wiring standards. This program prepares students for careers in electronics technology. Entry level positions in ancillary services, telecommunications, and radio communications.

Program Learning Outcomes
The successful student will be able to:
• demonstrate proficiency in technical skills and safety principles required for employment in the communication field.
• demonstrate problem solving and troubleshooting skills used in multi-spectrum industrial equipment for wired and over the air systems.
• demonstrate an understanding of theory and core material related to industrial communication, radio and telecommunications, that is required for transfer to a four year university degree program or for certification.

Career Opportunities:
Communications Technician

Total Units: 9
Required Courses
Course #        Name                          Units  
ELET B6        Analog and Digital Electronics 3.0  
ELET B61       Telecommunications 3.0  
ELET B62       Radio Communications 3.0  

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Electronics, Industrial Maintenance  
Job Skills Certificate

The Bakersfield College Electronics Certificate program will show the world that you have gained the necessary knowledge and skills to perform better on the job. This program of study is widely recognized and modeled after local industry competency standards. A certified electronic professional often appears more dedicated, more skilled and thus more attractive to prospective employers. Program includes study in the following areas: electrical theory and components, soldering, wiring diagrams, safety instrumentation, temperature, pressure, level detectors, motor theory and wiring, installation and wiring standards and mechanical systems. This program prepares students for careers in electronics technology. Entry level positions in petroleum/energy, instrumentation/process control, logistics and distribution, ancillary services, materials processing, and industrial maintenance.

Program Learning Outcomes
The successful student will be able to:
• demonstrate proficiency and safe operation of motors and process control technology that is required for industrial employment.
• demonstrate troubleshooting and problem solving skills used by maintenance personnel for industrial technology related fields.
• demonstrate an understanding of instrumentation and mechanical systems for transfer to a four year university degree program or for certification.

Career Opportunities:
Industrial Maintenance Mechanic, Instrumentation Technician, Process Technician, Controls Technician, Automation Technician

Total Units: 10  
Required Courses
Course #    Name              Units
ELET B55A  Electric Motors-Controls  4.0
ELET B56   Instrumentation & Process Control  3.0
ELET B70   Mechanical Systems  3.0

Electronics, Manufacturing Automation  
Job Skills Certificate

The Bakersfield College Electronics Certificate program will show the world that you have gained the necessary knowledge and skills to perform better on the job. This program of study is widely recognized and modeled after local industry competency standards. A certified electronic professional often appears more dedicated, more skilled and thus more attractive to prospective employers. Program includes study in the following areas: electrical theory and components, soldering, wiring diagrams, safety, programmable logic controllers, instrumentation, temperature, pressure, level detectors, computer integrated manufacturing motor theory and wiring, and mechanical systems. This program prepares students for careers in electronics technology, entry level positions in petroleum/energy, manufacturing, instrumentation/process control, logistics and distribution, ancillary services, food and materials processing, and industrial maintenance.

Program Learning Outcomes
The successful student will be able to:
• demonstrate proficiency in manufacturing automation related skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial environments and manufacturing.
• demonstrate an understanding of industrial manufacturing and electronics that is required for transfer to a four year university degree program and certification.

Career Opportunities:
Industrial Maintenance Mechanic, Instrumentation Technician, Process Technician, Controls Technician, Automation Technician

Total Units: 16  
Required Courses
Course #    Name              Units
ELET B4    Computer Integrated Manufacturing  3.0
ELET B5    Programmable Logic Controllers  3.0
ELET B55A  Electric Motors-Controls  4.0
ELET B56   Instrumentation & Process Control  3.0
ELET B70   Mechanical Systems  3.0
Emergency Medical Technician

Certificate

Emergency Medical Technician, Job Skills Certificate
Emergency Medical Technician
Job Skills Certificate

The Emergency Medical Technician job skills certificate complies with state requirements and ensures that the student has met the local EMS (Kern County authority) approval for county protocol training. The Emergency Medical Technician-1 (EMT-1) course consists of 162 hours, which includes 24 hours of emergency room/fire engine ride-along experience. The course prepares the student to perform basic emergency care as part of a mobile emergency team. It also provides the student with an understanding of the skills and assessment techniques needed to care for an ill or injured person in the prehospital setting. Upon successful completion of the course, students are eligible to take an examination for certification as an Emergency Medical Technician 1. The course is required for ambulance personnel, and many other first care providers. Students may later choose to become paramedics.

Program Learning Outcomes
Upon successful completion, the student will:

• demonstrate the ability to comprehend, apply, and evaluate the clinical information relative to his/her role as an entry level EMT-1.
• demonstrate technical proficiency in all skills necessary to fulfill the role of the entry level EMT-1.
• demonstrate personal behaviors consistent with professional and employer expectations for the entry level EMT-1.

Pre-admission Requirements:
• Each student must possess a current American Heart Association BLS -Healthcare Provider card. (Bakersfield College offers a BLS course (MEDS B52).
• Each student must be at least 18 years of age by the completion date of the course.
• Mandatory physical examination/immunizations and fit testing must be completed 4 weeks after start of the course. Costs of meeting health requirements are paid by the student. Failure to meet these requirements will result in student ineligibility for clinical rotations.
• Completion of the 3 unit Medical Terminology Course (MEDS B60) is strongly recommended.

Conditional Enrollment:
As a condition of enrollment in any Nursing/Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student’s expense). Please note the following:

• A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render student ineligible for clinical placement, as determined by the clinical agencies.

Accreditation and Program Approval
Bakersfield College is accredited by the Western Association of Schools and Colleges. The Emergency Medical Technician Program is approved by Kern County Emergency Medical Services and meets all state and county requirements.

Licensure/Certification Eligibility
Students with a misdemeanor and/or felony arrest conviction, either current or prior, may not receive certification or licensure from the State or County. Also, proof of citizenship (social security card and certified birth certificate) and fingerprinting are required by state certification/licensure agencies. Anyone who wishes clarification may contact the Kern County Emergency Medical Services Office at 661/868-5200.

To Transfer Coursework
A minimum of 7.5 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Career Opportunities:
EMT-1s are employed by fire departments, hospitals, and a variety of healthcare settings statewide. On average EMT’s annual average salary is $27,000.

Total Units: 8

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMTC B50</td>
<td>Emergency Medical Technician-1</td>
<td>8</td>
</tr>
</tbody>
</table>
Engineering

Degrees
Engineering Technology, Associate of Science
Engineering, Associate of Science
Engineering Technology
Associate of Science Degree

Engineering technologists and engineering technicians are members of a technical team that also includes scientists, engineers and craftsmen. The members of the technical team perform job functions that are complementary and sometimes overlapping. By virtue of their education, training and interests, engineering technologists and engineering technicians are usually differentiated as follows: An engineering technologist uses applied and basic training in mathematics, science, and engineering classes, engineering methods learned through classes and experience, and developed technical (hands-on) skills in direct support of engineering activities. A Bachelor of Science degree in Engineering Technology is required. An engineering technician operates in a support role to aid in design, production, manufacturing, operations, and maintenance. Under professional direction, the engineering technician conducts tests, trouble shooting and analysis, and other similar projects, or carries out functions such as drafting, surveying, designing and technical sales. An Associate in Science degree or a Certificate of Engineering Technology is required. Bakersfield College offers courses required for two years of engineering technology education. Completion of these courses, called the engineering technology core prepares students either for transfer to the colleges and universities offering bachelor's degrees in Engineering Technology, or for completion of an Associate in Science degree in Engineering Technology. A beginning engineering technology student should have completed high school mathematics through intermediate algebra or MATH BD/ MATH B70 at Bakersfield College, one year of high school drafting, and be eligible for ENGL B50.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment as an engineering technologist.
• demonstrate problem solving skills used in engineering technology design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university degree program in engineering technology

Career Opportunities:
Engineering Technology, Sales Engineer, Drafter, Industrial Designer

Total Units: 40

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR B47**</td>
<td>Introduction to Engineering and Design</td>
<td>2.0</td>
</tr>
<tr>
<td>ENGR B45</td>
<td>Properties of Materials</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR B24</td>
<td>Engineering Graphics and Descriptive Geometry</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM B2A*</td>
<td>Introductory General Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>PHYS B2A*</td>
<td>General Physics-Mechanics and Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B2b</td>
<td>General Physics-Sound, Light, Electricity, Magnetism, Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6A*</td>
<td>Analytic Geometry/Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6B*</td>
<td>Analytic Geometry/Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGR B19C</td>
<td>Introduction to Programming Concepts and Methodologies for Engineers</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives - At least 6 Units from the following:
See counselor or advisor for specific courses in the following areas
- Electronics/Electrical Technology
- Construction Technology
- Manufacturing Processes Technology
- Welding/Fabrication
- Industrial Drawing
- Graphics

*May be used to also fulfill general education requirements
**Meets student development requirement
Engineering

Associate of Science Degree

People working in the field of engineering and related technical fields bridge the gap between scientific principles and the application of these principles to the needs of society. The field is quite diversified with exciting job opportunities for people with varied mathematic, scientific, and technical skills. An engineer uses experience and judgment, as well as advanced training in engineering, science, and mathematics to formulate ideas and designs, and to determine standards, specifications, work orders and schedules so that projects can be economically beneficial to mankind. A Bachelor of Science in Engineering is required. Many engineers earn master's or doctorate degrees.

Program Learning Outcomes
Upon successful completion, the student will:
• solve engineering related problems as related to student made projects and assignments.

Career Opportunities:
Engineering Technician (with AS degree), Engineer (with BS degree)

Total Units: 47

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR B19C</td>
<td>Introduction to Programming Concepts and Methodologies for Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B47**</td>
<td>Introduction to Engineering and Design</td>
<td>2.0</td>
</tr>
<tr>
<td>MATH B6A*</td>
<td>Analytic Geometry/Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6B</td>
<td>Analytic Geometry/Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6C</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6D</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM B1A*</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYS B4A</td>
<td>Mechanics and Wave Motion</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4B</td>
<td>Heat, Electricity, Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS B4C</td>
<td>Optics &amp; Modern Physics</td>
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<tr>
<td>ENGR B17</td>
<td>Introduction to Electric Circuits</td>
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<tr>
<td>ENGR B36</td>
<td>Engineering Mechanics-Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGR B45</td>
<td>Properties of Materials</td>
<td>4.0</td>
</tr>
</tbody>
</table>

*May be used to also fulfill general education requirements
**Meets student development requirement
English

Degree
English, Associate of Arts for Transfer
English

Associate of Arts Degree for Transfer

The Associate in Arts in English for Transfer degree is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in English or similar major. The Associate in Arts in English for Transfer degree provides a study of literature and expository writing. English majors will be able to analyze literary work and will be able to demonstrate an understanding of and an ability to describe ways in which literature reflects historical, intellectual, and cultural contexts, as well as aesthetic tastes; English majors will be able to evaluate literature and expository and argumentative papers and essays through application of critical thinking techniques; and they will be able to write logical and coherent expository and argumentative papers, essays, summaries, and paraphrases using correctly the standard conventions of written English. Many employers value the writing and critical thinking skills acquired by English majors.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.
• The obtainment of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Total Units: 19

Required Courses

Course #     Name                                      Units
ENGL B1B     Introduction to Types of Literature and 3.0
ENGL B2      Advanced Composition and Critical Thinking or 4.0
ENGL B3      Argumentative Writing and Critical Thinking Through Literature 4.0

List A - Select 6 units from the following:
ENGL B5A     Survey of English Literature 3.0
ENGL B5B     Survey of English Literature 3.0
ENGL B20A    Survey of World Literature 3.0
ENGL B25B    Survey of World Literature 3.0
ENGL B30A    Survey of American Literature 3.0
ENGL B30B    Survey of American Literature 3.0

List B - Select 3 or 6 units based on option chosen in Required Core
ENGL B10     Introduction to Shakespeare and/or 3.0
ENGL B41A    Introduction to Creative Writing 3.0

List C - Select 3 units from the following:
ENGL B21     African-American Literature 3.0
ENGL B24     Latino/a Literature 3.0
ENGL B27     The Bible as Literature 3.0
ENGL B28     Classical Mythology 3.0
ENGL B41A    Introduction to Creative Writing 3.0

Program Learning Outcomes
Upon successful completion, the student will:
• write logical and coherent expository and argumentative papers, essays, summaries, and paraphrases using correctly the standard conventions of written English.
• demonstrate an understanding of and an ability to describe ways in which literature reflects historical, intellectual, and cultural contexts, as well as aesthetic tastes.
• evaluate literature and expository and argumentative papers and essays through application of critical thinking techniques.

Category
Units in Major 19
CSU GE Breadth 37-39
Possible double counting of GE’s 6-9
Degree Total 60.0
Fire Technology

Degrees
Fire Technology, Associate of Arts
Wildland Firefighting, Associate of Science

Certificates
Executive Chief Fire Officer, Certificate of Achievement
Fire Fighter I Academy, Certificate of Achievement
Fire Technology, Certificate of Achievement

Fire Academy, Job Skills Certificate
Wildland Firefighting, Job Skills Certificate
Fire Technology
Associate of Arts Degree

This degree program of study was developed to assist students who desire to become a firefighter, or desire Fire Technology as a career. This certificate or degree will aid existing firefighters in promoting/advancing through the ranks of engineer, captain, battalion chief, etc. The Bakersfield Fire Department requires an associate degree before a captain can take the promotional exam for battalion chief. This course of study will transfer to a four-year institute.

Note: FIRE B1 can be waived if the student has completed either academy (B62, B63 or B64) and B2 can be waived for students who have a minimum of two years continuous experience as a full-time paid firefighter. A GPA of at least 2.0 is required in the fire technology program. Of the 18 units required, a minimum of 12 units must be completed at Bakersfield.

Bakersfield College’s Regional Fire Technology Academy (RFTA) was authorized by the California Fire Service Training and Education System in 1980, with programs of study leading to Certified Company Officer, Chief Fire Officer, Executive Chief Officer. RFTA sponsors many cooperative training programs with federal, state, and local fire protection agencies. Individuals may develop a program suitable to their career goals with the aid of a college counselor. Courses may lead to the achievement of specific career goals, immediate employment, an associate degree, or transfer credits that satisfy requirements for a bachelor’s degree in Fire Technology.

To Achieve the Associate in Arts
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Fire Technology Associate in Arts degree.

Total Units: 26

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B1</td>
<td>Fire Protection Organization</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B2</td>
<td>Principles of Fire and Emergency Services</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Safety and Survival</td>
<td></td>
</tr>
<tr>
<td>FIRE B7</td>
<td>Building Construction for Fire Protection</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B3</td>
<td>Fire Command, Strategy, Tactics</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B4</td>
<td>Fire Behavior and Combustion</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B5</td>
<td>Fire Prevention</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B6</td>
<td>Fire Protection Equipment and Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>EMTC B50</td>
<td>Emergency Medical Technician</td>
<td>8.0</td>
</tr>
</tbody>
</table>

Program Learning Outcomes

Upon successful completion, the student will:

- identify minimum qualifications and entry-level skills for fire fighting hiring.
- demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents.
- identify and comprehend laws, regulations, codes and standards that influence fire department operations and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
- analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
- identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.
- identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety.
- differentiate between fire detection and fire suppression systems.
Wildland Firefighting
Associate of Science Degree

This degree is designed for people who desire to enter or enhance their career in a state or federal wildland firefighting agency. The course material is linked with the National Multi-Agency Coordinating Group certification process.

Additional course work is designed to meet or exceed the National Fire Protection Association’s 1051 Standard on Wildland Fire Fighter Professional Qualifications. The elective material is designed to allow a student to obtain some degree of specialization that may tailor a student’s education to qualify for supervisor positions in a wildland organization. Students may be placed in paramilitary and physically demanding environments designed to introduce the student to the job tasks and skills required to operate in the wildland fire services.

Career opportunities include:
Forest Service and the Bureau of Land Management. Discharged military service personnel can use their military service time towards their career in the Forest Service or the BLM.

To Achieve the Associate in Science
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Wildland Fire Technology Associate in Science degree.

Total Units: 30

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B25A</td>
<td>Wildland Fire Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25B</td>
<td>Wildland Firefighter Safety &amp; Survival</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25C</td>
<td>Wildland Fire Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25D</td>
<td>Wildland Public Information Officer, Prevention, &amp; Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B25E</td>
<td>Wildland Fire Logistics, Finance, and Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B26A</td>
<td>Initial Attack Incident Commander Type 4 (ICT4) (S-200)</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B26D</td>
<td>Interagency Incident Business Management S-260</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B26E</td>
<td>Fire Operations in the Wildland Urban Interface (S-215)</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRE B26G</td>
<td>S-230 Crew Boss Single Resource</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRE B26K</td>
<td>Field Observer (S-244)</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRE B26M</td>
<td>Display Processor (S-245)</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B27B</td>
<td>I-300 Intermediate Incident Command System (I-300)</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRE B28B</td>
<td>L-280 Followership to Leadership</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Program Learning Outcomes
Upon successful completion, the student will:
- differentiate influences effecting fire behavior.
- determine safety zones and escape routes.
- establish suppression priorities.
- describe the role of the public information officer in overall incident organization.
- compose planning section written objectives.
Executive Chief Fire Officer Certificate of Achievement

The Certificate of Achievement, Executive Chief Fire Officer Certificate of Achievement is designed to meet the training and educational requirements established by the State Fire Marshal’s Office for Fire Officer certification. The program will prepare students for the Company Officer, Chief Fire Officer, and Executive Chief Fire Officer exam and certification as a California State Executive Chief Fire Officer. After successful completion of this certificate, students will be able to take promotional exams for career advancement State wide.

Upon completion of the following courses with at least a “C” grade in each course, a student will be awarded a Certificate of Achievement for Executive Chief Fire Officer

Program Learning Outcomes
Upon successful completion, the student will:
• Identify the different levels of certification in the Executive Chief Fire Officer certification track, including Company Officer, Chief Fire Officer and Executive Chief Fire Officer.
• Describe administrative policies and procedures, including purchasing and budget processes.
• Identify methods to determine accident and injury prevention program effectiveness. Analyze data and accepted safety practices.
• Determine effective recruitment, selection, and placement of human resources according to the law and consistent with current best practices.

Total Units: 21.5

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B52A</td>
<td>Company Officer 2A</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B52B</td>
<td>Company Officer 2B</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B52C</td>
<td>Company Officer 2C</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B52D</td>
<td>Company Officer 2D</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B52E</td>
<td>Company Officer 2E</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B52F</td>
<td>Chief Fire Officer 3A</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRE B52G</td>
<td>Chief Fire Officer 3B</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B52H</td>
<td>Chief Fire Officer 3C</td>
<td>1.0</td>
</tr>
<tr>
<td>FIRE B52I</td>
<td>Chief Fire Officer 3D</td>
<td>1.0</td>
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<tr>
<td>FIRE B52J</td>
<td>Executive Chief Fire Officer 4A</td>
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<tr>
<td>FIRE B52K</td>
<td>Executive Chief Fire Officer 4B</td>
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</tr>
<tr>
<td>FIRE B52L</td>
<td>Executive Chief Fire Officer 4C</td>
<td>1.5</td>
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<tr>
<td>FIRE B52M</td>
<td>Executive Chief Fire Officer 4D</td>
<td>2.0</td>
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<tr>
<td>FIRE B52N</td>
<td>Executive Chief Fire Officer 4E</td>
<td>0.5</td>
</tr>
<tr>
<td>FIRE B52O</td>
<td>Fire Instructor 1</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Fire Fighter I Academy Certificate of Achievement

The Fire Fighter I Academy Certificate of Achievement is designed to meet the training and educational requirements established by the State Fire Marshal’s Office for Fire Fighter I certification. The program will prepare students for the national registry exam and certification as a California State Emergency Medical Technician. After successful completion of this certificate, students will be authorized to take the National Registry EMT examination.

To Achieve the Certificate of Achievement
Upon completion of the following courses with a grade of ‘C’ or better in each course, students will be awarded a Fire Fighter I Academy Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• perform skills that meet National Fire Protection Association Standard 1001 for Fire Fighter and California State Fire Marshal Standards for Fire Fighter.
• demonstrate written and verbal communication skills required for entry-level fire fighter positions.
• analyze emergency and hazardous conditions that are inherent to the firefighting profession.

Total Units: 20.5-24.5

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B64</td>
<td>State Firefighter I Academy</td>
<td>16.5</td>
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<tr>
<td>or</td>
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<tr>
<td>FIRE B62</td>
<td>Firefighter I Academy</td>
<td>12.5</td>
</tr>
<tr>
<td>and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMTC B50</td>
<td>Emergency Medical Technician</td>
<td>8.0</td>
</tr>
</tbody>
</table>

The courses can be taken out of order. If students take these courses in the following sequence, they can complete the program in one year (two semesters):

1. EMTC B50 taken in fall of year 1.
   (with a “C” or higher grade.)

2. Fire B64 OR B62 taken in spring of year 1.
   (with a “C” or higher grade.)

Total Units: 20.5 – 24.5 units
Fire Technology
Certificate of Achievement

This certificate was developed to assist students who desire to become a firefighter, or desire Fire Technology as a career. This certificate will aid existing firefighters in promoting/advancing through the ranks of engineer, captain, battalion chief, etc. The Bakersfield Fire Department requires an associate degree before a captain can take the promotional exam for battalion chief. This course of study will transfer to a four-year institution.

Note: FIRE B1 is a prerequisite and must be completed before taking other core fire technology courses. FIRE B1 can be waived if the student has completed either academy (B62 or B63) and B2 can be waived for students who have a minimum of two years continuous experience as a full-time paid firefighter. A GPA of at least 2.0 is required in the fire technology program. Of the 30 units required, a minimum of 12 units must be completed at Bakersfield College.

Bakersfield College’s Regional Fire Technology Academy (RFTA) was authorized by the California Fire Service Training and Education System in 1980, with programs of study leading to Certified Fire and Certified Fire Chief. RFTA sponsors many cooperative training programs with federal, state, and local fire protection agencies. Individuals may develop a program suitable to their career goals with the aid of a college counselor. Courses may lead to the achievement of specific career goals, immediate employment, an associate degree, or transfer credits that satisfy requirements for a bachelor’s degree in Fire Technology.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Fire Technology Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
- identify minimum qualifications and entry-level skills for fire fighter hiring.
- describe the following elements:
  - application process.
  - written exam process.
  - physical agility exam.
  - oral interview.
  - chief’s interview.
  - background investigation.
  - fire fighter probationary process.
  - identify fire service history, culture, and diversity.
- demonstrate the ability to analyze, appraise, and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety, including:
  - size-up.
  - report on conditions.
  - Incident Command System.
  - RECEO.
  - 10 Standard Firefighting Orders.
  - 18 Situations that shout “Watch Out.”
  - common factors associated with injuries and line of duty deaths.

Total Units: 33.5-36.5

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B1</td>
<td>Fire Protection Organization</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B2</td>
<td>Principles of Fire and Emergency Services</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Safety and Survival</td>
<td></td>
</tr>
<tr>
<td>FIRE B7</td>
<td>Building Construction for Fire Protection</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B3</td>
<td>Fire Command, Strategy, &amp; Tactics</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>FIRE B51B</td>
<td>Fire Command 1A</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B4</td>
<td>Fire Behavior and Combustion</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B5</td>
<td>Fire Prevention</td>
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<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>FIRE B51D</td>
<td>Fire Prevention 1A</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>and</td>
<td></td>
</tr>
<tr>
<td>FIRE B51E</td>
<td>Fire Prevention 1B</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B6</td>
<td>Fire Protection Equipment and Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>FIRE B72H</td>
<td>Emergency Medical Technician 1</td>
<td>7.5</td>
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Required General Education Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENGL B50*</td>
<td>Introduction to College Composition</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>ENGL B1A</td>
<td>Expository Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1A</td>
<td>General Psychology</td>
<td>3.0</td>
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<tr>
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<td>or</td>
<td></td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B1</td>
<td>Public Speaking</td>
<td>3.0</td>
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<tr>
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<td>or</td>
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</tr>
<tr>
<td>COMM B2</td>
<td>Interpersonal Communication</td>
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</tr>
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<td>or</td>
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</tr>
<tr>
<td>COMM B4</td>
<td>Persuasive Communication</td>
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</tr>
<tr>
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<td>or</td>
<td></td>
</tr>
<tr>
<td>COMM B8</td>
<td>Small Group Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*ENGL B60 may be substituted for ENGL B50 or ENGL B1a for Fire Technology Certificate of Achievement only.

Note: FIRE B1 and B2 are waived for students who have a minimum of two years service as a paid, full-time firefighter. A GPA of at least 2.0 is required in the certificate program. Of the 33.5-36.5 units required, a minimum of 12 units must be completed at Bakersfield College.
Fire Academy
Job Skills Certificate

The Fire Academy Job Skills Certificate will prepare the student for entry level firefighter positions, and provides the minimum training required to become a reserve firefighter. It provides the basic educational and practical training essential for firefighting, including the advanced study of organizational procedures; forcible entry tools; protective breathing apparatus; inspection procedures; fire protection equipment and systems; wildland fire control; EMR; fire behavior; and petroleum fire procedures.

Program Learning Outcomes
Upon successful completion, the student will:

- demonstrate written and verbal communication skills required for entry-level firefighter positions.
- analyze emergency and hazardous conditions that are inherent to the firefighting profession.

Total Units: 12.5-18.0

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B62</td>
<td>Fire Fighter I Academy</td>
<td>12.5</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
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<tr>
<td>FIRE B64</td>
<td>Firefighter I Academy</td>
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<tr>
<td>and</td>
<td></td>
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</tr>
<tr>
<td>EMTC B51</td>
<td>Emergency Medical Responder</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Wildland Firefighting
Job Skills Certificate

The Wildland Firefighting Job Skills Certificate will prepare students for a career in wildland firefighting, to work on the fire ground, and be red carded. This job skills certificate is required for the student to apply for a wildland firefighter position. The certificate will provide students with a basic understanding of wildland firefighting principles, tactics, organization, and fireline safety. It includes training in the identification and operation of wildland fire tools and equipment, water-handling equipment, and fireline construction practices.

To Achieve the Job Skills Certificate
Upon completion of the following courses with a grade of ‘C’ or better in each course, students will be awarded a Wildland Firefighting Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will:

- explain and demonstrate an understanding of wildland fire service organizations.
- describe and explain the environmental factors of fire behavior which affect a wildfire.
- demonstrate an understanding of important safety practices involved in wildland firefighting.
- identify and operate common wildland firefighting hand tools and equipment.
- explain and demonstrate how to construct a fireline.
- analyze information on water-handling equipment.

Total Units: 3

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE B71A</td>
<td>Seasonal Firefighter Basic Training</td>
<td>2.0</td>
</tr>
<tr>
<td>FIRE B71B</td>
<td>Seasonal Firefighter Basic Training</td>
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</table>
Foods and Nutrition

Degrees
Culinary Arts, Associate of Science
Foodservice Management Option, Associate of Science

Certificates
Culinary Arts, Certificate of Achievement
Child Nutrition Management, Certificate of Achievement
Dietetic Services Supervisor Program, Certificate of Achievement
Culinary Arts
Associate of Science Degree

Degree emphasizes quality food production and service in commercial and institutional food service operations. Course work includes practical training in the campus restaurant, the Renegade Room. National Restaurant Association ServSafe certificate is required for completion of the degree.

To Achieve the Associate in Science
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Culinary Arts Associate in Science degree.

Program Learning Outcomes
Upon successful completion, the student will:

• perform dining room service function using a variety of types of service and demonstrate an understanding of quality customer service.
• practice proper basic principles of food safety (sanitation) and their application to food service operations and procedures.
• practice the principles and methods of food preparation emphasizing use of standardized recipes, industry production standards, and development of work skills.
• maximize nutrient retention in food preparation and storage and application of nutritional principles and to apply fundamentals to the preparation of a variety of products.
• have an understanding of a supervisor’s role and responsibilities in managing a food service operation.

Career opportunities:
Include sous chef, food service manager, food buyer, and cook.

Total Units: 27.5
Required Courses (including completion of the ServSafe exam)
Course # Name Units
FDSV B50 Introduction to the Foodservice Industry 2.0
FDSV B51 Food and Nutrition Orientation 0.5
FDSV B52 Foodservice Sanitation and Safety 2.0
FDSV B55A Food Service Production Theory I 2.5
FDSV B55B Food Service Production Theory II 2.5
FDSV B55C Food Service Production Laboratory I 2.0
FDSV B55D Food Service Production Laboratory II 2.0
FDSV B55E Advanced Food Service Practicum 3.0
FDSV B55F Fundamentals of Baking 2.0
FDSV B55I Food and Nutrition Internship 1.0
FDSV B59 Food Service Production Management 3.0
NUTR B10 Elementary Nutrition 3.0
FDSV B48WE Occupational Work Experience Education 2.0

Foodservice Management Option
Associate of Science Degree

A sanitation certificate such as ServSafe or equivalent is required for this associate degree.

To Achieve the Associate in Science
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Foodservice Management Option Associate in Science degree.

Program Learning Outcomes
Upon successful completion, the student will:

• practice proper basic principles of food safety (sanitation) and their application to food service operations and procedures.
• practice the principles and methods of food preparation emphasizing use of standardized recipes, industry production standards, and development of work skills.
• perform dining room service function using a variety of types of service and demonstrate an understanding of quality customer service.
• maximize nutrient retention in food preparation and storage and application of nutritional principles and to apply fundamentals to the preparation of a variety of products.
• demonstrate basic baking principles and to apply fundamentals to the preparation of a variety of products.
• have an understanding of a supervisor’s role and responsibilities in managing a food service operation.

Total Units: 29.5
Required Courses (including completion of the ServSafe exam)
Course # Name Units
FDSV B50 Introduction to the Foodservice Industry 2.0
FDSV B51 Food & Nutrition Orientation 0.5
FDSV B52 Foodservice Sanitation and Safety 2.0
FDSV B55A Food Service Production Theory I 2.5
FDSV B55B Food Service Production Theory II 2.5
FDSV B55C Food Service Production Laboratory I 2.0
FDSV B55D Food Service Production Laboratory II 2.0
FDSV B55E Advanced Food Service Practicum 3.0
FDSV B55F Fundamentals of Baking 2.0
FDSV B55I Food and Nutrition Internship 1.0
FDSV B59 Food Service Production Management 3.0
NUTR B10 Elementary Nutrition 3.0
FDSV B48WE Occupational Work Experience Education 2.0
BSAD B53A Introduction to Accounting I 3.0
SPST B201L Special Projects and Studies 3.0
Child Nutrition Management
Certificate of Achievement

Program emphasizes quality food production, production records, nutrition standards and student service in child nutrition programs including public and private schools, child-care centers and day-care centers.

A Sanitation Certificate such as ServSafe or equivalent is required for this certificate.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Child Nutrition Management Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• practice proper basic principles of food safety (sanitation) and their application to food service operations and procedures.
• practice the principles and methods of food preparation emphasizing use of standardized recipes, industry production standards, and development of work skills.
• perform dining room service function using a variety of types of service and demonstrate and understanding of quality customer service.
• have an understanding of a supervisor’s role and responsibilities in managing a food service operation.
• maximize nutritional retention in food preparation and storage and application of nutritional principles in menu planning.
• demonstrate basic baking principles and to apply fundamentals to the preparation of a variety of products and ordinances, and firefighter health and safety.

Total Units: 25.5-31

Required Courses
Course # Name Units
FDSV B50 Introduction to the Foodservice Industry 2.0
FDSV B52 Foodservice Sanitation and Safety 2.0
or
FDSV B55A Food Service Production Theory I 2.5
and
FDSV B55C Food Service Production Laboratory I 2.0
and
NUTR B10 Elementary Nutrition 3.0
WEXP B248 Occupational Work Experience Education 2.0
ENGL English Course 3.0
COMP Computer Studies Course 3.0

Electives - Select at least 6 units from the following:
FDSV B55A Food Service Production Theory I 2.5
FDSV B55B Food Service Production Theory II 2.5
FDSV B55C Food Service Production Laboratory I 2.0
FDSV B55D Food Service Production Laboratory II 2.0
FDSV B59 Food Service Production Management 3.0

Culinary Arts
Certificate of Achievement

Program emphasizes quality food production and service in commercial and institutional food service operations. Course work includes practical training in the campus restaurant, the Renegade Room.

A sanitation certificate such as ServSafe or equivalent is required for this Certificate.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Culinary Arts Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• perform dining room service function using a variety of types of service and demonstrate an understanding of quality customer service.
• practice proper basic principles of food safety (sanitation) and their application to food service operations and procedures.
• practice the principles and methods of food preparation emphasizing use of standardized recipes, industry production standards, and development of work skills.
• maximize nutrient retention in food preparation and storage and application of nutritional principles and to apply fundamentals to the preparation of a variety of products.
• have an understanding of a supervisor’s role and responsibilities in managing a food service operation.

Total Units: 24.5

Required Courses (including completion of the ServSafe exam)
Course # Name Units
FDSV B50 Introduction to the Foodservice Industry 2.0
FDSV B51 Food and Nutrition Orientation 0.5
FDSV B52 Foodservice Sanitation and Safety 2.0
FDSV B55A Food Service Production Theory I 2.5
FDSV B55B Food Service Production Theory II 2.5
FDSV B55C Food Service Production Laboratory I 2.0
FDSV B55D Food Service Production Laboratory II 2.0
FDSV B55F Fundamentals of Baking 2.0
FDSV B55I Food and Nutrition Internship 1.0
FDSV B59 Food Service Production Management 3.0
NUTR B10 Elementary Nutrition 3.0
WEXP B248 Occupational Work Experience Education 3.0
FDSV B48WE Occupational Work Experience Education 2.0
Dietetic Services Supervisor Program
Certificate of Achievement

Program provides training for students planning employment in the food service department of a health care operation. Courses in this program meet State of California Department of Health Services certification requirements. Consult with a member of the Foods and Nutrition Program staff before scheduling courses in the program. At this time appropriate clinical field experience will be planned. A sanitation certificate such as ServSafe or equivalent is required for this certificate.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Dietetic Services Supervisor Program Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• locate the state and federal laws and regulations applicable to food service operations in health care (California Code of Regulations, Title 22 Federal Code of Regulations, Business and Professions Code of Registered Dietitians and Dietetic Technicians Registered, FDA Food Code, etc.).
• utilizing the above references laws, and in conjunction with the registered dietitian, determine compliance with regulations and acceptable standards of care.
• identify the role and limitations of the Dietary Service Supervisor under Title 22.
• review, with a registered dietitian, a facility’s policies and procedures to ensure that they are in compliance with regulations and standards of practice.
• locate diet manuals and show ability to use them by making menu substitutions to meet the nutritional needs of residents/patients in accordance with standard of care.
• help registered dietitian ensure that menus and standardized recipes are followed by food service staff. Help develop standardized menus.
• ensure that food is prepared and served by methods that conserve nutritive value, flavor, and appearance. Ensure that food is prepared to meet individual texture and nutrient needs and that substitutions are of similar nutritive value.
• ensure that residents/patients receive and consume foods as prescribed by the physician. Document diet prescriptions, food preferences, and the possible need for texture modification and/or assistance during meal times by maintaining and updating card profiles.
• protect food in all phases of preparation. Ensure that food is inspected for quality upon receiving, then stored, prepared, and served under sanitary conditions to prevent food borne illness. Sanitation oversight includes all food service department areas and components such as storage rooms, refrigerators/freezers, food preparation, and service equipment and surfaces, tray lines, and carts.
• assist with day to day operations such as:
  • food forecasting, ordering, storage, preparation, and service.
  • employee staffing schedules.
  • employee health and safety programs.
  • labor relations.
  • employee orientation and ongoing planned staff development.

Total Units: 18.5
Required Courses (including completion of the ServSafe exam)
Course # Name Units
FDSV B50 Introduction to the Foodservice Industry 2.0
FDSV B52 Foodservice Sanitation and Safety 2.0
FDSV B55A Food Service Production Theory I 2.5
FDSV B55C Food Service Production Laboratory I 2.0
FDSV B59 Food Service Production Management 3.0
NUTR B10 Elementary Nutrition 3.0
NUTR B50 Modified Diets 2.0
FDSV B64A Dietetic Service Supervisor Practicum 2.0
Geology

Degree
Geology, Associate in Science for Transfer
Geology

Associate in Science Degree for Transfer

The Associate in Science in Geology Degree for Transfer is designed to provide students a clear pathway to the CSU Geology major and completion of the Geology baccalaureate degree; to grant guaranteed admission to a CSU in a similar major, with junior standing; and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

The Associate in Science in Geology Degree for Transfer provides a path to students who wish to transfer to a CSU in the field of geology and serves the diverse needs of students who wish to obtain a broad and an in-depth understanding of the geological sciences. Additionally, the Associate of Science in Geology Degree for Transfer allows students to learn the fundamental principles and practices of geology in order to create a solid foundation for their future personal, academic, or vocational endeavors.

The Associate of Science in Geology Degree for Transfer also provides solid preparation that is appropriate for a variety of scientific disciplines.

The major in geology is appropriate for interested students who desire to be employed within the local petroleum industry working as a geology technician or seeking a solid science background for the teaching profession. The major is designed to provide students with a strong general education in math and science, introduction to physical and historical geology, as well as a general introduction to basic engineering skills.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:

- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtaining of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Program Learning Outcomes
Upon successful completion, the student will:

- demonstrate the knowledge of and recognize the processes that explain natural phenomena.
- apply the methodologies of science when approaching a problem.
- apply logical quantitative and qualitative reasoning in solving problems or analyzing arguments

Total Units: 26

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL B10</td>
<td>Introduction to Geology</td>
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<tr>
<td>GEOL B10L</td>
<td>Introduction to Geology Laboratory</td>
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<td>GEOL B11</td>
<td>Historical Geology</td>
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<td>GEOL B11L</td>
<td>Historical Geology Laboratory</td>
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<tr>
<td>CHEM B1A</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM B1B</td>
<td>General Chemistry and Chemical Analysis</td>
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<tr>
<td>MATH B6A</td>
<td>Analytic Geometry/Calculus I</td>
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<tr>
<td>MATH B6B</td>
<td>Analytic Geometry/Calculus II</td>
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Category

<table>
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<tr>
<th>Description</th>
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<tbody>
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<td>Units in Major</td>
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<td>CSU GE Breadth</td>
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<td>Possible double counting of GE’s</td>
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<tr>
<td>Degree Total</td>
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</table>
History

Degree
History, Associate in Arts for Transfer
History
Associate in Arts Degree for Transfer

The Associate in Arts in History for Transfer Degree is designed to provide students a clear transfer pathway to the CSU history major and completion of the history baccalaureate degree, to grant guaranteed admission to a CSU to a similar major, with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

Historians analyze the events and processes of the past, both to gain more understanding of human nature, in any place and at any time, and to explain the distinctive dynamics of particular societies, usually in regional and chronological contexts.

Historical study is an important part of the liberal arts program and the development of critical thinking skills. Most careers in history require education beyond the associate degree and some require a graduate degree. The study of history can serve as preparation for graduate study in education, law, business, government and journalism. Many employers value the writing and critical thinking skills acquired by History majors.

Successful completion of the Associate in Arts in History for Transfer Degree guarantees the student acceptance to a local California State University to pursue a baccalaureate degree.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:

- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The attainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Program Learning Outcomes
Upon successful completion, the student will:

- analyze major forces, events, and people instrumental in shaping human history.
- examine past social/cultural value systems which have formed a basis for human beliefs and challenges to those beliefs.
- analyze the various racial, ethnic and social sub/groups which have played a role in the shaping of human history.
- evaluate historical evidence using both primary and secondary sources.

Total Units: 18

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST B17A</td>
<td>History of the United States</td>
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</tr>
<tr>
<td>HIST B17B</td>
<td>History of the United States since 1870</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A - Select 6 units from the following:

- HIST B1 World History from the Origins of Civilizations to 1600 or 3.0
- HIST B4A European Civilization and 3.0
- HIST B2 History of the World (Since 1650) or 3.0
- HIST B4B European Civilization 3.0

List B - Select 3 units from each group:

Group 1

- HIST B1 World History from the Origins of Civilizations to 1600 3.0
- HIST B2 History of the World (Since 1650) 3.0
- HIST B20A African American History of the United States 3.0
- HIST B20B African American History/U.S. 3.0
- HIST B30A Early Chicano History 3.0
- HIST B30B History of Chicanos in the Southwest 3.0
- HIST B33 Latin American History 3.0

Group 2

- ECON B2 Principles of Economics-Macro 3.0
- HIST B18 History of California 3.0
- POLS B1 American Government: National, State and Local 3.0

Category

- Units in Major 18
- CSU GE Breadth 37-39
- Possible double counting of GE’s 6-15
- Degree Total 60
Human Services

Degree
Human Services, Associate in Arts

Certificate
Human Services, Job Skills Certificate
Human Services
Associate in Arts Degree

The major in human services provides the student with an academic background for entry-level positions in various human services agencies. It also prepares the student for upper-division work in human services and other behavioral sciences. The field is interdisciplinary with the overall career goal of helping people.

To Achieve the Associate in Arts
Upon completion of the following courses with at least a 'C' grade in each course, the student will be awarded a Human Services Associate in Arts degree.

To Transfer Coursework
A minimum of 19 semester units in the major with a grade of 'C' or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
Upon successful completion, the student will:
1. demonstrate an understanding of the perspectives, theories, methods and core concepts of the behavioral sciences.
2. explain the major problems and issues in the disciplines in their contemporary, historical and geographical contexts.
3. demonstrate an understanding of an ability to describe the contributions and perspectives of women, ethnic and other minorities and Western and non-Western peoples.

Total Units: 19

**Required Courses**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMSV B40</td>
<td>Introduction to Human Services</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B45</td>
<td>Minority Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B1A</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B40</td>
<td>Introduction to Lifespan Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>CHDV B21</td>
<td>Child Growth and Development: Birth</td>
<td>3.0</td>
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<tr>
<td>or</td>
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</tbody>
</table>

In addition, a total of four units of HMSV B5 is required. Two units are permitted in a given semester. All units must be completed in agencies where assignment and supervision is approved by the Program Coordinator. Students wishing to enroll in HMSV B5 must have completed HMSV B40.

HMSV B5  Human Services Internship  4.0

Human Services
Job Skills Certificate

The Human Service Job Skills Certificate emphasizes classroom instruction as well as hands-on-experience through interning with community human services agencies. The field of human services is very broad. It is concerned with meeting human needs and improving the overall quality of people's lives. The field is interdisciplinary, meaning that knowledge from a variety of other fields of study is applied to the overall goal of helping people.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a 'C' grade in each course, the student will be awarded a Human Services Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will:
1. demonstrate an understanding of the perspectives, theories, methods and core concepts of the behavioral sciences.
2. explain the major problems and issues in the disciplines in their contemporary, historical and geographical contexts.
3. demonstrate an understanding of an ability to describe the contributions and perspectives of women, ethnic and other minorities and Western and non-Western peoples.

Total Units: 15

**Required Courses**

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<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
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<td>ENGL B50</td>
<td>Introduction to College Composition</td>
<td>4.0</td>
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<tr>
<td>HMSV B40</td>
<td>Introduction to Human Services</td>
<td>3.0</td>
</tr>
<tr>
<td>HMSV B5</td>
<td>Human Services Internship</td>
<td>2.0</td>
</tr>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
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</tbody>
</table>
Industrial Drawing

**Degrees**
Industrial Drawing, Associate of Arts
Industrial Technology, Industrial Drawing Option, Associate of Science

**Certificate**
AutoCAD, Job Skills Certificate
Industrial Technology: Industrial Drawing Option
Associate of Science Degree

Students who complete the Industrial Technology degree with the Industrial Drawing option will acquire information, skills, and training in a variety of fields that will enable them to apply their knowledge in an array of situations, including engineering and manufacturing settings. Students will acquire the practical knowledge and skills to successfully enter industry employment or to advance within their organization. Career opportunities include architecture, engineering, industrial technology draftsman, CAD Technician, engineering technician, CAD Manager, and detailer.

To Achieve the Associate in Science
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Industrial Technology, Industrial Drawing Option Associate in Science degree.

To Transfer Coursework
A minimum of 31 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university degree program in industrial technology.

Career Opportunities:
Architectural and Civil Drafters, Electrical and Electronics Drafters, Engineering Technician, Mechanical Drafters

Total Units: 34

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B20B</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B40</td>
<td>Parametric Modeling Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B50</td>
<td>Process Piping</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B70</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>INDR B51</td>
<td>Electrical Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B52</td>
<td>Geographic Information Systems (GIS)</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B1AB</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives - Select at least 3 units from the following:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR B24</td>
<td>Engineering Graphics and Descriptive Geometry</td>
</tr>
<tr>
<td>WELD B1A</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
</tr>
<tr>
<td>WELD B1B</td>
<td>Introduction to the Welding Processes</td>
</tr>
</tbody>
</table>
Industrial Drawing
Associate of Arts Degree

This degree covers the principles of industrial drawing/CAD with the emphasis on using the AutoCAD software package from basic 2D principles through 3D solid modeling to obtain graphic solutions, design refinements, modifications and delineations. Software customization is also emphasized. Career opportunities include drafter, CAD operator, engineering tech, CAD manager, and architecture CAD operator.

Program Learning Outcomes
Upon successful completion, the student will:

• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university degree program or for certification in the department programs.

Career Opportunities:
Architectural and Civil Drafters, Electrical and Electronics Drafters, Engineering Technician, Mechanical Drafters

Total Units: 20
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B50</td>
<td>Process Piping</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B51</td>
<td>Electrical Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B52</td>
<td>Geographic Information Systems (GIS)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B40</td>
<td>Parametric Modeling Fundamentals</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives - Select 3 Units from the following:
ARCH B16  Digital Tools for Graphics Communication 3.0
INDR B20B Computer Aided Drafting and Design (CAD) 3.0

Industrial Drawing, AutoCAD
Job Skills Certificate

This certificate covers the principles of industrial drawing/CAD with the emphasis on using the AutoCAD software package from basic 2D principles through 3D solid modeling to obtain graphic solutions, design refinements, modifications and delineations. Software customization is also emphasized.

Program Learning Outcomes
Upon successful completion, the student will:

• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university degree program or for certification in the department programs.

Career Opportunities:
Architectural and Civil Drafters, Electrical and Electronics Drafters, Mechanical Drafters

Total Units: 8
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B20B</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Baccalaureate Degree, Industrial Automation

Degree
Industrial Automation, Bachelor of Science Degree
Bachelor of Science Degree  

Industrial Automation represents the technology-driven business model of the 21st century. In today’s industry, engineers involved in developing new products or processes work closely with technologists who apply scientific and technical knowledge in the design, manufacturing, and repair of automation systems. Bakersfield College’s Baccalaureate Degree Program in Industrial Automation will train students with the skill set those technologists require, meeting the needs of a host of local employers, including major companies in the agriculture, distribution, and manufacturing sectors.

This degree focuses on the application of electronics and computer technology to industrial automation systems, which may apply to various categories of job titles in the following areas:

- Maintenance of Industrial Equipment
- Automation (Programmable Logic Controllers/PAC’s, robotics, materials and product handling, motion control motor drives, networked control systems, automated production equipment, integration of various technologies into solutions, and related areas)
- Process Control and Measurement (Instrumentation, Industrial Measurement)
- Quality Assurance/Quality Control
- Industrial Safety and Hygiene
- Technical Management (managing technical employees)
- Operations Management (managing company operations)
- Facilities Planning, Infrastructure, Upgrade Supervision
- Operations Management
- Technical Sales and Marketing
- Design and Engineering Operations (positions that do not require the employee to have completed a four-year Engineering degree and/or be licensed)

The program prepares students for careers in the design, operation, and management of industrial automation systems focusing on the local industries that utilize these technologies, such as petroleum production, food production, fabrication, and logistics. Significant emphasis is placed on project based learning facilitated by significant laboratory work.

There will be approximately 62 units of general education and major coursework for lower division requirements of the degree. The lower division general education pattern closely follows the CSU GE Breadth Course pattern, including specific GE courses required for this program. In addition, most of the lower division core electronics courses will need to be completed such as: basic electronics, computer integrated manufacturing, programmable logic controllers, and instrumentation/process control.

There will be 60 units of upper division coursework, including new upper division technical and general education courses. Upper division technical courses will cover a broad range of industrial topics including automation networks and systems, automation measurement and motion control, and automation applications in manufacturing and production processes, but will also include courses in project management, leadership and entrepreneurship, quality assurance and facilities planning and operations.

Mission

The Baccalaureate Program in Industrial Automation is designed to prepare individuals for technical management careers in industries that utilize automation, including the petroleum, manufacturing, logistics and agriculture industry sectors, in order to improve the regional economy.

Program Learning Outcomes:

Upon successful completion, the student will:

- apply critical and analytical problems solving skills to industry related problems dealing with safety, quality assurance and maintenance of systems.
- display effective communication skills including presentation and technical writing skills.
- consider mathematical and scientific principles in proposing solutions in the field of industrial automation and manufacturing.
- appraise and document industrial automation processes to propose solutions that integrate instrumentation and control hardware with software for manufacturing operations.
- evaluate and manage automation and manufacturing projects by applying their knowledge of resource allocation principles in an ethical environment.

Prerequisite Requirements

All prerequisite coursework must be completed with a “C” grade or higher.

- ENGL B1A (Expository Composition); 3 units at Bakersfield College or equivalent course at another accredited college.
- MATH B1A (Precalculus I), MATH B2 (Basic Functions and Calculus for Business), OR MATH B6A (Analytic Geometry/Calculus I); 4 units at Bakersfield College or equivalent course at another accredited college.
- PHYS B2A (General Physics-Mechanics and Heat) OR PHYS B4A (Mechanics and Wave Motion); 4 units at Bakersfield College or equivalent course at another accredited college.
- Critical Thinking (CSU GE Area A3) - PHIL B7, or B9, or ENGL B1B, or B2, or B3, or COMM B5; 3 units at Bakersfield College or equivalent course at another accredited college.
- Communication (CSU GE Area A1) - COMM B1, or B4 or B8; 3 units at Bakersfield College or equivalent course at another accredited college.
- Any six of the following eight courses must be completed for admittance to the Baccalaureate Degree Program. However, all eight lower division technical core courses must be completed prior to graduation. Demonstrated competency in lower division core courses may satisfy this requirement subject to evaluation by program faculty.
1. **ELET B1** (Basic Electronics) 4 units
2. **ELET B4** (Computer Integrated Manufacturing) 3 units
3. **ELET B5** (Programmable Logic Controllers) 3 units
4. **ELET B55A** (Electric Motors - Controls) 4 units
5. **ELET B56** (Instrumentation and Process Control) 3 units
6. **ELET B58** (Advanced Programmable Logic Controllers) 3 units
7. **ELET B61** (Telecommunications) 3 units
8. **INDR B12** (Introduction to Drafting and CAD) 2 units

### General Education

General Education courses meeting the CSU General Education Pattern are required to graduate with the BS in Industrial Automation from Bakersfield College. Twenty-nine of the 41 CSU GE units must be completed for admittance to the Baccalaureate Degree Program. Within these 29 units, CSU GE Areas A1, B1, B3, B4 (as outlined above) must be satisfied. However, all 41 lower division GE units must be completed prior to graduation.

A. **English Language Communication and Critical Thinking (9 units)**
   - A.1 Oral Communication (3 units)
     - COMM B1, or B4 or B8
     - (COMM B8 recommended)
   - A.2 Written Communication (3 units)
     - ENGL B1A
   - A.3 Critical Thinking (3 units)
     - PHIL B7, or B9, or ENGL B1B, or B2, or B3, or
     - COMM B5 (COMM B5 recommended)

B. **Scientific Inquiry and Quantitative Reasoning (9 units)**
   - B.1 Physical Universe (4 units)
     - PHYS B2A or higher (prerequisite course)
   - B.2 Life Science
     - Any course listed in Area B.2 of the CSU General Education Pattern in the Bakersfield College Catalog (Crop Science B5 recommended)
   - B.3 Laboratory Activity
     - PHYS B2A Lab or higher (prerequisite course)
   - B.4 Mathematics/Quantitative Reasoning (4 units)
     - MATH B1A or higher (prerequisite course)

C. **Arts and Humanities (9 units)**
   - Any course as listed in Area C of the CSU General Education Pattern in the Bakersfield catalog. **Note: At least one course must be taken from Arts and one from Humanities**
     - C.1 – Arts - one course (ART B4 recommended)
     - C.2 – Humanities - one course; (PHIL B10 recommended)
     - C.1 or C.2 – Any one course (SPAN B1 recommended)

D. **Social Science (9 units)**
   - Any three courses listed in Area D.1 – D.10 of the CSU General Education Pattern in the Bakersfield College Catalog. (ECON B1 or B2, HIST B17A or B17B, or POLS B1 recommended)

E. **Lifelong Understanding and Self-Development (3 units)**
   - Any one, three unit course as listed in Area E of the CSU General Education Pattern in the Bakersfield College Catalog (PSYC B1A recommended)

### Application Procedure

The Engineering and Industrial Technology office must receive all application forms and transcripts during the designated filing period. For detailed information on the application period and procedures, please refer to the Baccalaureate Degree Program website at [http://www.bakersfieldcollege.edu/industrial-automation](http://www.bakersfieldcollege.edu/industrial-automation) or come to the Bakersfield College Engineering and Industrial Technology office in IT1.

### Program Costs

An estimated cost for the first semester of the upper division program is approximately $2,500.

### Curriculum Overview

The lower division coursework in the Baccalaureate Degree Program includes the general education requirements outlined in the California State University General Education Breadth course list in the addition to the existing electronics courses that comprise the technical core to prepare for upper division coursework.

### Educational Planning

Success in the Baccalaureate Degree Program is best achieved by having a well-defined educational plan. Listed below is a suggested educational plan for Baccalaureate Degree Program applicants:
### Total Units: 120

#### Freshman Fall Semester

14 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS B1</td>
<td>American Government: National State and Local (GE Area D Social Sciences)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B1A</td>
<td>Precalculus I (GE Area B4)</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B5</td>
<td>Programmable Logic Controllers</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B1</td>
<td>Basic Electronics</td>
<td>4.0</td>
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</table>

#### Freshman Spring Semester

16 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B1A</td>
<td>Expository Composition (GE Area A2)</td>
<td>3.0</td>
</tr>
<tr>
<td>ART B4</td>
<td>Two-Dimensional Design (GE Area C Arts and Humanities)</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS B2A</td>
<td>General Physics-Mechanics and Heat (GE Areas B1/B3)²</td>
<td>4.0</td>
</tr>
<tr>
<td>ELET B4</td>
<td>Computer Integrated Manufacturing</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B56</td>
<td>Instrumentation and Process Control</td>
<td>3.0</td>
</tr>
</tbody>
</table>

#### Sophomore Fall Semester

15 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRPS B5</td>
<td>Plant Science (GE Area B2 Life Sciences)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B5</td>
<td>Rhetoric and Argumentation (GE Area A3 Critical Thinking)</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B17A</td>
<td>History of the United States or History of the United States Since 1870 (GE Area D Social Sciences)</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B58</td>
<td>Advanced Programmable Logic Controllers</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B61</td>
<td>Telecommunications</td>
<td>3.0</td>
</tr>
</tbody>
</table>

#### Sophomore Spring Semester

15 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC B1A</td>
<td>General Psychology (GE Area E Lifelong Learning and Self-Development)</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B8</td>
<td>Small Group Communication (GE Area A1 Oral Communication)</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B55A</td>
<td>Electric Motors - Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>Lower Division Elective</td>
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#### Junior Fall Semester

15 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL B100</td>
<td>Technical Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B100</td>
<td>Industrial Design Graphics I</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B105</td>
<td>Materials Science for the Technician</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B114</td>
<td>Industrial Safety Principles and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B125</td>
<td>Operations Management in the Automation Field</td>
<td>3.0</td>
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</table>

#### Junior Spring Semester

15 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON B1</td>
<td>Principles of Economics-Micro or Principles of Economics-Macro (GE Area D Social Sciences)</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Economics-Macro (GE Area D Social Sciences)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B101</td>
<td>Industrial Design Graphics II</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B120</td>
<td>Industrial Automation Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B122</td>
<td>Applied Methods of Motion and Process Control</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B135</td>
<td>Economic Decision Making</td>
<td>3.0</td>
</tr>
</tbody>
</table>

#### Senior Fall Semester

15 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC B100</td>
<td>Industrial &amp; Organization Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL B10</td>
<td>Introduction to Ethics (GE Area C Arts and Humanities)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B132</td>
<td>Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B140</td>
<td>Quality Management</td>
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</tr>
<tr>
<td>INDA B143</td>
<td>Materials and Maintenance Management</td>
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</tr>
</tbody>
</table>

#### Senior Spring Semester

15 Units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL B100</td>
<td>Industry Ethics</td>
<td>3.0</td>
</tr>
<tr>
<td>SPAN B1</td>
<td>Elementary Spanish I (GE Area C Arts and Humanities)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B110</td>
<td>Industrial Automation Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B144</td>
<td>Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>INDA B150</td>
<td>Systems Design and Integration</td>
<td>3.0</td>
</tr>
</tbody>
</table>

(1) Math B2 or Math B6a may also satisfy this requirement
(2) May obtain credit via scores on AP Physics test; Physics B4a will also satisfy this requirement
Industrial Technology

Degree
Industrial Technology, General, Associate in Science

Fields of Study Available:
Construction (See page 125)
Electronics (See page 133)
Industrial Drawing (See page 161)
Manufacturing Technology (See page 177)
Welding (See page 225)
Woodworking and Cabinetmaking (See page 229)
Industrial Technology (General) Associate of Science Degree

Students who complete the Industrial Technology degree with the Industrial Drawing option will acquire information, skills, and training in a variety of fields that will enable them to apply their knowledge in an array of situations, including engineering and manufacturing settings. Students will acquire the practical knowledge and skills to successfully enter industry employment or to advance within their organization. Career opportunities include architecture, engineering, and Industrial Technology, draftsman, CAD Technician, Engineering Technician, CAD Manager, and detailer.

To Achieve the Associate in Science
Upon completion of the following courses with at least a 'C' grade in each course, the student will be awarded an Industrial Technology (General) Associate in Science degree.

To Transfer Coursework
A minimum of 22 semester units in the major with a grade of 'C' or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Total Units: 22

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MFGT B1AB</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>ELET B1</td>
<td>Basic Electronics (DC and AC)</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B1A</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1B</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Electives - Select 3 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDR B20B</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B2</td>
<td>CNC Lathe Programming &amp; Operation</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO B1AB</td>
<td>Introduction to Automotive Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP B5</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate proficiency in technical skills and safety principles required for industrial employment.
- demonstrate problem solving skills used in industrial design and product development.
- demonstrate a deep understanding of the core material required for transfer to a four year university degree program in industrial technology.
Journalism

Degree
Journalism, Associate in Arts for Transfer
## Journalism

### Associate in Arts Degree for Transfer

The Associate in Arts in Journalism for Transfer degree is intended for those transfer-directed students who plan to complete an AA in Journalism because it guarantees admission to the CSU system (but not to a particular campus or major). In order to earn the Associate of Arts in Journalism for Transfer, students must complete 60 required semester units of CSU-transferable coursework which includes CSU General Education or IGETC requirements with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the Associate of Arts in Journalism for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is designated “high-unit” major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system.

Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

### Requirements for AA-T or AS-T degrees:

The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:

- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.

### Program Learning Outcomes

Upon successful completion, the student will:

- demonstrate the ability - through learned skills, critical thinking and organization - to perform the function of reporter, photographer or editor on a print and online publication.
- demonstrate how to conduct the process of reporting.
- demonstrate how to conduct the process of photojournalism and multimedia.
- discuss various forms of media and how they relate to society through historical and current knowledge of mass communication.
- demonstrate an understanding of journalism ethics and standards.

### Total Units: 18-20

#### Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRNL B1</td>
<td>Media and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B2</td>
<td>Beginning Reporting</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B27A</td>
<td>Newspaper Production for Reporters</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**List A - Select 3 units from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRNL B15</td>
<td>Press Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B16</td>
<td>Multimedia Reporting</td>
<td>3.0</td>
</tr>
<tr>
<td>JRNL B26</td>
<td>Newspaper/Online Production II</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**List B - Select 6 units from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART B17</td>
<td>Black and White Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM B5</td>
<td>Rhetoric and Argumentation</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B1</td>
<td>Principles of Economics-Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Economics-Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>4.0</td>
</tr>
<tr>
<td>POLS B1</td>
<td>American Government: National, State and Local</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B2</td>
<td>Comparative Government</td>
<td>3.0</td>
</tr>
</tbody>
</table>

#### Category

- Units in Major: 18-20
- CSU GE Breadth: 37-39
- Possible double counting of GE’s: 6-9
- Degree Total: 60
Kinesiology

Degree
Kinesiology, Associate in Arts for Transfer
Kinesiology

Associate in Arts Degree for Transfer

The Associate in Arts in Kinesiology for Transfer (AA-T) is intended for all students who plan to complete an Associate in Arts in Kinesiology. This degree is especially valuable for those students planning on completing a bachelor's degree in Kinesiology at a CSU campus because the Associate in Arts in Kinesiology for Transfer guarantees admission to the CSU system (but not to a particular campus or major).

Students transferring to a CSU campus that does accept the Associate in Arts in Kinesiology for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated “high-unit” major).

This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.

Total Units: 21-24

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL B32</td>
<td>Human Anatomy and Physiology I</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B33</td>
<td>Human Anatomy and Physiology II</td>
<td>4.0</td>
</tr>
<tr>
<td>PHED B42</td>
<td>Introduction to Kinesiology</td>
<td>3.0</td>
</tr>
<tr>
<td>PHED B6A</td>
<td>Coeducational Team and Individual Activity: Archery</td>
<td>1.0</td>
</tr>
<tr>
<td>PHED B6BB</td>
<td>Coeducational Team and Individual Activity: Basketball</td>
<td>1.0</td>
</tr>
<tr>
<td>PHED B6BLB</td>
<td>Coeducational Team and Individual Activity: Beginning Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>PHED B6FCX</td>
<td>Coeducational Team and Individual Activity: Fitness Center</td>
<td>1.0</td>
</tr>
<tr>
<td>PHED B6G</td>
<td>Coeducational Team and Individual Activity: Golf</td>
<td>1.0</td>
</tr>
<tr>
<td>PHED B6JD</td>
<td>Coeducational Team and Individual Activity: Jazz Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>PHED B6SC</td>
<td>Coeducational Team and Individual Activity: Soccer</td>
<td>1.0</td>
</tr>
<tr>
<td>PHED B6T</td>
<td>Coeducational Team and Individual Activity: Tennis</td>
<td>1.0</td>
</tr>
</tbody>
</table>

PHED B6WT Coeducational Team and Individual Activity: Weight Training 1.0
PHED B6V Coeducational Team and Individual Activity: Volleyball 1.0
PHED B32 Shape Up 3.0

List A - Select at least 7 units from the following:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics or</td>
<td>4.0</td>
</tr>
<tr>
<td>PSYC B5</td>
<td>Elementary Statistics for the Behavioral and Social Sciences</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM B11</td>
<td>Introduction to General, Organic, and Biochemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYS B2A</td>
<td>General Physics-Mechanics and Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>PHED B36</td>
<td>First Aid and CPR</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Category

Units in Major 21-24
CSU GE Breadth 37-39
Possible double counting of GE’s 7-10
Degree Total 60.0

- The obtainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Program Learning Outcomes

Upon successful completion, the student will:
• analyze the history, research, and current information in Kinesiology and their current applications.
• demonstrate and explain the basic anatomy and physiological principles at work in both sport performance and general fitness activities.
• demonstrate an understanding of the value and significance of physical activity for human development, human interactions and quality of life.
• demonstrate and describe the primary aspects of injury and trauma response as a first responder.
• recognize the principles of physical fitness development and maintenance as well as the body’s responses to physical activity.
Liberal Arts

Degree
Liberal Arts, Associate of Art Degree
Liberal Arts

Associate of Arts Degree

The Liberal Arts major at Bakersfield College is designed to provide students with the opportunity to earn an associate in arts degree in a broad area of study. The major is interdisciplinary and allows students to develop a variety of skills transferable to numerous occupations and fields of study. The major is intended to provide general knowledge and to develop the intellectual capacities, such as reasoning and judgment, as opposed to professional or vocational skills. This major is suitable for transfer students preparing for upper division study in a variety of fields in the liberal arts and for those students undecided as to major or further study.

Students may satisfy requirements for the Liberal Arts major by completing one of the two options listed below. With any option selected, students must also complete all graduation requirements for Bakersfield College including a total of 60 degree applicable units with an overall grade point average of 2.0.

To Achieve the Associate in arts
Upon completion of the following courses with at least a 'C' grade in each course, the student will be awarded a Liberal Arts Associate in Arts degree.

To Transfer Coursework
A minimum of 18 semester units in the major with a grade of 'C' or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Select one of the following options:

Option One
• Complete the Intersegmental General Education Transfer Curriculum (IGETC) with a "C" average.
• Complete at least 18 units from recommended lower division major preparation for the major at the approved university of your choice with a "C" grade in each course.
• UC transferable elective units, if needed, to total 60 units.

Option Two
• Complete CSU General Education Breadth with a "C" average.
• Complete at least 18 units from recommended lower division major preparation for the major at the approved university of your choice with a "C" grade in each course.
• CSU transferable elective units, if needed, to total 60 units.
Manufacturing/Machine Technology

**Degrees**
Industrial Technology, Manufacturing Technology Option, Associate of Science

**Certificates**
Manufacturing Technology, Certificate of Achievement

Computer Numerical Control Programming, Job Skills Certificate
Industrial Technology, Manufacturing Technology Option, Associate of Science Degree

This program teaches students the spectrum of tools utilized in the manufacturing industry: manual machining, computer-controlled machining (CNC), welding, computer-aided design, and mathematics. General education courses may be selected to prepare for career advancement or to help meet transfer requirements for the California State University system.

To Achieve the Associate in Science
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded an Industrial Technology, Manufacturing Technology Option Associate in Science degree.

To Transfer Coursework
A minimum of 24 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment in the manufacturing industry.
• demonstrate problem solving skills used in manufacturing design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university program or for certification in the manufacturing program.

Career Opportunities: Machinist, CNC Operator, CNC Programmer, and drafter/designer.

Total Units: 24

Required Core Courses
Course #  Name                                Units
MFGT B1AB  Machine Tool Processes             3.0
MFGT B2    CNC Lathe Programming & Operation  3.0
MFGT B3    CNC Mill Programming               3.0
INDR B12   Introduction to Drafting and CAD   2.0
TECM B52   Industrial Math and Quality Control or equivalent 3.0
WELD B1A   Introduction to Oxygen Acetylene Welding and Cutting 2.0
WELD B1B   Introduction to the Welding Processes 2.0
WELD B54A  Blueprint Reading for Welders and Machinists 3.0

Electives - Select at least 3 units from the following:
INDR B20A  Computer Aided Drafting and Design (CAD) 3.0
INDR B40   Parametric Modeling Fundamentals 3.0
INDT B273  Special Problems in Tool Metal Working 2-3.0
WELD B53AB Shielded Metal Arc Welding 4.0
WELD B74A  Introduction to GMAW (Gas Metal Arc) and FCAW (Flux Core Arc Welding) 2.0
WELD B74B  Introduction to Gas Tungsten Arc Welding 2.0

Manufacturing Technology Certificate of Achievement

This program teaches students the spectrum of tools utilized in the manufacturing industry: manual machining, computer-controlled machining (CNC), welding, computer-aided design, and basic math.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Manufacturing Technology Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment in the manufacturing industry.
• demonstrate problem solving skills used in manufacturing design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university program or for certification in the manufacturing program.

Total Units: 31-33

Required Core Courses
Course #  Name                                Units
MFGT B1AB  Machine Tool Processes             3.0
MFGT B2    CNC Lathe Programming & Operation  3.0
MFGT B3    CNC Mill Programming               3.0
INDR B12   Introduction to Drafting and CAD   2.0
TECM B52   Industrial Math and Quality Control or equivalent 3.0
MATH B60   Beginning Algebra or equivalent 5.0
INDR B20A  Computer Aided Drafting and Design (CAD) 3.0
INDR B40   Parametric Modeling Fundamentals 3.0
INDT B273  Special Problems in Tool Metal Working 2-3.0
WELD B1A   Introduction to Oxygen Acetylene Welding and Cutting 2.0
WELD B1B   Introduction to the Welding Processes 2.0
WELD B54A  Blueprint Reading for Welders and Machinists 3.0

Electives - Select at least 7 units from the following:
INDR B20A  Computer Aided Drafting and Design (CAD) 3.0
INDR B40   Parametric Modeling Fundamentals 3.0
INDT B273  Special Problems in Tool Metal Working 2-3.0
WELD B74A  Introduction to GMAW (Gas Metal Arc) and FCAW (Flux Core Arc Welding) 2.0
WELD B74B  Introduction to Gas Tungsten Arc Welding 2.0
Basic Machine Tool Operations
Lathe, Mill - Job Skills Certificate

This certificate covers the principles of machine tool technology to include the use of precision measuring, drilling machines, saws, lathes and milling machines. Career opportunities include machinist.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Basic Machine Tool Operations - Lathe, Mill Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university program or for certification in the department programs.

Total Units: 3
 Required Core Courses
Course # Name Units
MFGT B1AB Machine Tool Processes 3.0

Computer Numerical Control
Programming, Job Skills Certificate

This certificate covers the principles of set-up, operation and programming of computer numerical control (CNC) lathes and milling machines. Career opportunities include CNC Machinist CNC Programmer and CNC Operator.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Computer Numerical Control Programming Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university program or for certification in the department programs.

Total Units: 6
 Required Core Courses
Course # Name Units
MFGT B2 CNC Lathe Programming & Operation 3.0
MFGT B3 CNC Mill Programming 3.0
Mathematics

Degree
Mathematics, Associate of Science for Transfer
## Associate of Science in Mathematics

### Degree for Transfer

The Associate of Science in Mathematics for Transfer is intended for all students who plan to complete an AS in Mathematics. This degree is especially valuable for those students planning on completing a bachelor’s degree in Mathematics at a CSU campus because the Associate of Science in Mathematics for Transfer guarantees admission to the CSU system (but not to a particular campus or major).

### Requirements for the Associate of Science Degree for Transfer:

- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

### Program Learning Outcomes

Upon successful completion, the student will:

- demonstrate an understanding of functions from multiple perspectives.
- use numerical, graphical, symbolic, and verbal representations to solve problems and communicate with others.
- use technology as a tool for exploring mathematical concepts.
- demonstrate an ability to work with mathematical abstractions, analyze mathematical relationships, make plausible conjectures, and develop proofs.
- synthesize their mathematical knowledge of engineering technology.

### Total Units: 18

#### Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH B6A</td>
<td>Analytic Geometry/Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6B</td>
<td>Analytic Geometry/Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6C</td>
<td>Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B6D</td>
<td>Ordinary Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B6E</td>
<td>Elementary Linear Algebra</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Category

- Units in Major: 18
- CSU GE Breadth: 37-39
- Possible double counting of GE’s: 3
- Degree Total: 60.0
Music

Degree
Music, Associate of Arts for Transfer

Certificate
Commercial Music, Certificate of Achievement
Students who plan to major or minor in music should commit themselves to the highest possible level of proficiency in theory, piano, literature, group performance, and applied (individual) instruction in their performance area. Students should take the required courses in music and complete courses in general education for the transfer college of their choice. Elective courses will both enrich the student’s background and balance weak areas of knowledge for later academic growth.

Prerequisites
In order to register for MUSC B7 Applied Music, students must first pass a qualifying audition. The audition includes solo performance, music sight-reading, and a music theory placement exam. Auditions are scheduled prior to the start of each semester. Interested students should contact the current Performing Arts Department Chair for guidance on when and how to audition.

Requirements for the Associate of Arts Degree for Transfer:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtaining of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

To Transfer Coursework
A minimum of 19 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Baccalaureate Degree Names:
BA in Music, B. Mus in Music

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate the ability to recognize, describe and/or effectively produce various components of music including elements of pitch and rhythm.
- demonstrate an understanding and appreciation of the ways in which arts reflect historical, intellectual, and cultural contexts, as well as aesthetic tastes.
- demonstrate through successful group or individual performance acquired musical skills and knowledge appropriate to lower-division major preparation.

Total Units: 23-25

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC B2</td>
<td>Basic Elements of Music</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B4A</td>
<td>Elementary Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B4B</td>
<td>Elementary Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B4C</td>
<td>Intermediate Theory-Contemporary Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B7</td>
<td>Applied Music (4 enrollments of 1 unit each)</td>
<td>4.0</td>
</tr>
<tr>
<td>MUSC B15A</td>
<td>Ear Training and Sight Singing</td>
<td>1.0</td>
</tr>
<tr>
<td>MUSC B15B</td>
<td>Ear Training and Sight Singing</td>
<td>1.0</td>
</tr>
<tr>
<td>MUSC B15C</td>
<td>Intermediate Ear Training and Sight Singing</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Students may complete any combination of 4 enrollments of the following performance ensembles (multiples of the same ensemble are encouraged):

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC B10A</td>
<td>Concert Band (4 enrollments of 1 unit each)</td>
<td>4.0</td>
</tr>
<tr>
<td>MUSC B12A</td>
<td>College Orchestra (4 enrollments of 1 unit each)</td>
<td>4.0</td>
</tr>
<tr>
<td>MUSC B13A</td>
<td>Jazz Ensemble (4 enrollments of 1 unit each)</td>
<td>4.0</td>
</tr>
<tr>
<td>MUSC B14A</td>
<td>College Choir (4 enrollments of 1.5 unit each)</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Category

<table>
<thead>
<tr>
<th>Units in Major</th>
<th>CSU GE Breadth</th>
<th>Possible double counting of GE’s</th>
<th>Degree Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-25</td>
<td>37-38</td>
<td>6</td>
<td>60.0</td>
</tr>
</tbody>
</table>
Commercial Music
Certificate of Achievement

The Commercial Music Certificate of Achievement provides experience and exposure to key components of commercial music, allowing students to combine their passions for technology and music. Students will gain basic knowledge in technologies crucial to the modern recording studio, including use of popular digital audio workstations such as Logic and Pro Tools. Exposure to sound synthesis will provide perspective on the infrastructure of today’s music software. Experience with audio hardware and software, along with courses in music business and commercial music composition will provide skills necessary to pursue a career in audio engineering, production, performance, composition, promotion, publishing, and many other options.

The Commercial Music Ensemble is a 1 credit ensemble that students are welcome to join and put to use the skills they learn in the CA courses. This is not required, but serves to mimic real world commercial music opportunities and challenges.

Program Learning Outcomes
Upon successful completion, the student will:
• be able to identify and make use of pertinent components of audio recording systems, digital audio workstations, and other musical technologies affiliated with commercial music applications.
• demonstrate knowledge and application of key concepts in music business. Concepts include digital marketing, contracts, publishing, royalties, and booking.
• be able to identify and make use of relationships between audio hardware and software. Concepts include consoles, software synthesis, analog synthesis, microphone and microphone technique, signal processing, mixing, and mastering.
• demonstrate knowledge and familiarity with commercial music composition. Concepts include composing within genres and styles relevant to commercial music, creating production music and jingles, creating composition reel.

Career Opportunities:
Recording Studio Engineer, Live Sound Engineer, Private Music Instructor, Instrument Designer Music Marketing, Booking Agent, Performing Musician, Composer, Audio Editor

Total Units: 21
Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC B30</td>
<td>Introduction to Music Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B31</td>
<td>Commercial Music Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B32</td>
<td>Sound Design and Synthesis</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B33</td>
<td>Live Sound</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B34</td>
<td>Recording Techniques I</td>
<td>3.0</td>
</tr>
<tr>
<td>MUSC B35</td>
<td>Recording Techniques II</td>
<td></td>
</tr>
<tr>
<td>MUSC B36</td>
<td>Music Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Nursing

Degrees
Nursing, Associate of Science
LVN to Associate Degree Nursing Program, Associate of Science
LVN to Non-Degree Nurse (30 Unit Option)

Certificates
Vocational Nursing Program, Certificate of Achievement
Nurse Assistant, Job Skills Certificate
The mission of the Bakersfield College Associate Degree Nursing Program is to prepare entry-level registered nurses as providers and managers of care across the health/illness continuum and as members within the profession. Graduate nurses will collaborate with members of the health care team, be effective communicators, be politically aware, and demonstrate a commitment to lifelong learning.

The study of nursing is the application of knowledge from the arts and sciences. The purpose of the Bakersfield College Associate Degree Program is to provide the foundation for students to become competent registered nurses. The ADN Program respects the individuality of students and recognizes that each student has different educational, experiential, cultural, spiritual, economic and social backgrounds and a unique support system. The aim of the program is to provide a positive, innovative learning model that fosters the development of critical thinking and problem solving skills so that the graduate nurse is equipped to deliver care to a culturally diverse population in a variety of healthcare settings.

Estimated Program Costs (Gainful Employment):
The estimated cost for the entire program is approximately $7,435. (This includes tuition for Nursing courses only.) For information on Estimated Program Costs, please visit our website at: [https://www.bakersfieldcollege.edu/nursing/rn](https://www.bakersfieldcollege.edu/nursing/rn)

Program Learning Outcomes
Upon successful completion, the student will:

- demonstrate the standards of competent performance as defined by the California Board of Registered Nursing. The successful graduate will be considered competent when he/she consistently demonstrates the ability to transfer knowledge scientific knowledge from social, biological, and physical sciences in applying the nursing process as follows:
- formulates a nursing diagnosis through observation of the client’s physical condition and behavior, and through interpretation of information obtained from the client and others, including the health team.
- formulates a care plan, in collaboration with the client, which ensures that direct and indirect nursing care services provide for the client’s safety, comfort, hygiene, and protection, and for disease prevention and restorative measures.
- performs skills essential to the kind of nursing action to be taken, explains the health treatment to the client and family and teaches the client and family how to care for the client’s health needs.
- delegates tasks to subordinates based on the legal scopes of practice of the subordinates and on the preparation and capability needed in the tasks to be delegated, and effectively supervises nursing care being given by subordinates.
- evaluates the effectiveness of the care plan through observation of the client’s physical condition and behavior, signs and symptoms of illness, and reactions to treatment and through communication with the client and health team members, and modifies the plan as needed.
- acts as the client’s advocate, as circumstances require, by initiating action to improve health care or to change decisions or activities which are against the interests or wishes of the client, and by giving the client the opportunity to make informed decisions about health care before it is provided. (Title 16, California Code of Regulations, Division 14 – Board of Registered Nursing, Article 4, Section 1443.5)
- perform Nursing practice, which includes those functions, including basic health care, that help people cope with difficulties in daily living that are associated with their actual or potential health or illness problems or the treatment thereof, including all of the following:
  - direct and indirect patient care services that ensure the safety, comfort, personal hygiene, and protection of patients; and the performance of disease prevention and restorative measures. (Business and Professions Code, Division 2, Chapter 6, Section 2725)
  - direct and indirect patient care services, including, but not limited to, the administration of medications and therapeutic agents, necessary to implement a treatment, disease prevention, or rehabilitative regimen ordered by and within the scope of licensure of a physician, dentist, podiatrist, or clinical psychologist, as defined by Section 1316.5 of the Health and Safety Code.
  - the performance of skin tests, immunization techniques, and the withdrawal of human blood from veins and arteries.
  - observation of signs and symptoms of illness, reactions to treatment, general behavior, or general physical condition, and:
    - determination of whether the signs, symptoms, reactions, behavior, or general appearance exhibit abnormal characteristics.
    - implementation, based on observed abnormalities, of appropriate reporting, or referral, or standardized procedures, or changes in treatment regimen in accordance with standardized procedures, or the initiation of emergency procedures.

Requirements for the Nursing (AS) program:
Conditional Enrollment: As a condition of enrollment in any Nursing/Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student’s expense). Please note the following:
- A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render student ineligible for clinical placement, as determined by the clinical agencies.
- If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.
• A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and mask fit testing are also required and are performed at the student’s expense.

General education courses are required to graduate from Bakersfield College with an Associate Degree in Nursing. It is suggested that most of these courses be completed prior to beginning the Nursing Program. Courses must be completed with a “C” grade or better.

Prerequisite Coursework
• ENGL B1A (Expository Composition), three units at Bakersfield College or equivalent course at another accredited college.
• MATH BD/B70 (Intermediate Algebra) or higher, three units at Bakersfield College or an equivalent course at another accredited college.
• CHEM B11 (Introduction to General, Organic and Biochemistry) or CHEM B2A (Introduction to General Chemistry) or CHEM B1A (General Chemistry) at Bakersfield College or an equivalent Chemistry course of three to five units from another accredited college.
• BIOL B16 (General Microbiology) five units at Bakersfield College or equivalent course at another accredited college.
• BIOL B32 (Anatomy & Physiology I) four units at Bakersfield College or equivalent course at another accredited college.
• BIOL B33 Anatomy & Physiology II 4 units at Bakersfield College or equivalent course at another accredited college.
• Social Science (three units) – any course listed in Area D3 of the Bakersfield College General Education Pattern
• Arts, Literature, Philosophy, and Foreign Language (three units) – any course as listed in Area C of the Bakersfield College General Education Pattern.
• COMM B1*
• ANTH B2* or SOC B1*
• PSYC B1A*
• Physical Education (one unit) required from PHED courses numbered from B2-B33.
• HLED Health Education (3 units) is waived for RN students
• NURS B100 Educational Planning - recommended or any course listed under Bakersfield College General requirements for graduation.
(A student development course is recommended to be taken during the first semester of courses at Bakersfield College to assure priority registration.)

Career Opportunities:
Employment in a variety of healthcare facilities and settings.

Total Units: 41
Required Courses
Course # Name Units
Semester 1
NURS B20 Fundamentals of Nursing 4.0
NURS B21 Medical Surgical Nursing 1 5.0
NURS B22 Pharmacology 3.0

Semester 2
NURS B23 Medical Surgical Nursing 2 4.5
NURS B24 Obstetrics - Maternity Nursing 3.0
NURS B25 Mental Health - Psychiatric Nursing 3.5

Semester 3
NURS B26 Medical Surgical Nursing 3 5.5
NURS B27 Pediatric Nursing 3.5

Semester 4
NURS B28 Medical Surgical Nursing 4 7.0
NURS B29 Gerontology - Community Nursing 2.0

The following curriculum pattern is Effective Fall 2017
Total Units: 38
First Semester - 11.5 units
NURS B40 Foundations of Nursing Practice Nursing 4.5
NURS B41 Nursing Care of the Medical Surgical Patient 1 4.0
NURS B42 Pharmacology for Nursing Practice 3.0

Second Semester - 8.5 units
NURS B43 Nursing Care of the Medical Surgical Patient 2 5.5
NURS B44 Nursing Care of the Psychiatric-Mental Health Client 3.0

Third Semester - 11 units
NURS B46 Nursing Care of the Medical Surgical Patient 3 5.0
NURS B47 Nursing Care of Maternal Newborn Patients 3.0
NURS B48 Nursing Care of Children and Adolescents 3.0

Third Semester - 7 units
NURS B49 Nursing Care of the Medical Surgical Patient 4 7.0

More information can be found on the Allied Health website at www.bakersfieldcollege.edu/allied-health or in the Bakersfield College Allied Health Office, MS 178.

Pursuant to SB 1393, a student of a registered nursing program with a baccalaureate degree from a regionally accredited institution is not required to complete any coursework other than that which is unique and exclusively required to earn a nursing degree from that institution. All course work must meet the graduation requirements and licensure eligibility requirements as set forth by the Board of Registered Nursing.
LVN to Associate Degree Nursing Program
Associate in Science

The study of nursing is the application of knowledge from the arts and sciences. The purpose of the Bakersfield College LVN to Associate Degree Program is to provide the foundation for students to become competent registered nurses. The LVN-ADN Program respects the individuality of students and recognizes that each student has different educational, experiential, cultural, spiritual, economic and social backgrounds and a unique support system. The aim of the program is to provide a positive, innovative learning model that fosters the development of critical thinking and problem solving skills so that the graduate nurse is equipped to deliver care to a culturally diverse population in a variety of healthcare settings. Mission The mission of the Bakersfield College LVN-Associate Degree Nursing Program is to prepare entry-level registered nurses as providers and managers of care across the health/illness continuum and as members within the profession. Graduate nurses will collaborate with members of the health care team, be effective communicators, be politically aware, and demonstrate a commitment to lifelong learning.

Estimated Program Costs (Gainful Employment):
The estimated cost for the entire program is approximately $7,435. (This includes tuition for Nursing courses only.) For information on Estimated Program Costs, please visit our website at: https://www.bakersfieldcollege.edu/nursing/lvn-rr

Program Learning Outcomes
Upon successful completion, the student will:

- demonstrate the standards of competent performance as defined by the California Board of Registered Nursing. The successful graduate will be considered competent when he/she consistently demonstrates the ability to transfer knowledge scientific knowledge from social, biological, and physical sciences in applying the nursing process as follows:
  - formulates a nursing diagnosis through observation of the client’s physical condition and behavior, and through interpretation of information obtained from the client and others, including the health team.
  - formulates a care plan, in collaboration with the client, which ensures that direct and indirect nursing care services provide for the client’s safety, comfort, hygiene, and protection, and for disease prevention and restorative measures.
  - performs skills essential to the kind of nursing action to be taken, explains the health treatment to the client and family and teaches the client and family how to care for the client’s health needs.
  - delegates tasks to subordinates based on the legal scopes of practice of the subordinates and on the preparation and capability needed in the tasks to be delegated, and effectively supervises nursing care being given by subordinates.
  - evaluates the effectiveness of the care plan through observation of the client’s physical condition and behavior, signs and symptoms of illness, and reactions to treatment and through communication with the client and health team members, and modifies the plan as needed.
  - acts as the client’s advocate, as circumstances require, by initiating action to improve health care or to change decisions or activities which are against the interests or wishes of the client, and by giving the client the opportunity to make informed decisions about health care before it is provided. (Title 16, California Code of Regulations, Division 14 – Board of Registered Nursing, Article 4, Section 1443.5)
  - perform Nursing practice, which includes those functions, including basic health care, that help people cope with difficulties in daily living that are associated with their actual or potential health or illness problems or the treatment thereof, including all of the following:
    - direct and indirect patient care services that ensure the safety, comfort, personal hygiene, and protection of patients; and the performance of disease prevention and restorative measures. (Business and Professions Code, Division 2, Chapter 6, Section 2725)
    - direct and indirect patient care services, including, but not limited to, the administration of medications and therapeutic agents, necessary to implement a treatment, disease prevention, or rehabilitative regimen ordered by and within the scope of licensure of a physician, dentist, podiatrist, or clinical psychologist, as defined by Section 1316.5 of the Health and Safety Code.
    - the performance of skin tests, immunization techniques, and the withdrawal of human blood from veins and arteries.
    - observation of signs and symptoms of illness, reactions to treatment, general behavior, or general physical condition, and:
      - determination of whether the signs, symptoms, reactions, behavior, or general appearance exhibit abnormal characteristics.
      - implementation, based on observed abnormalities, of appropriate reporting, or referral, or standardized procedures, or changes in treatment regimen in accordance with standardized procedures, or the initiation of emergency procedures.

Requirements for the LVN to ADN program:
Conditional Enrollment: As a condition of enrollment in any Nursing/Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student’s expense). Please note the following:

- A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render student ineligible for clinical placement, as determined by the clinical agencies.
- If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.
• A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and mask fit testing are also required and are performed at the student’s expense.

• Proof of IV Certification is required. Students may meet this requirement by taking MEDS B66 prior to entering the LVNADN Program.

• One year experience working as an LVN.

• Possession of current California Vocational Nurse License • American Heart Association BLS - Healthcare Provider card - current within one year. (MEDS B52 fulfills this requirement).

• Graduation from high school or an equivalent education.

• Overall GPA of 2.5

General education courses are required to graduate from Bakersfield College with an Associate Degree in Nursing. It is suggested that most of these courses be completed prior to beginning the Nursing Program.

Courses must be completed with a C grade or better

### Prerequisite Coursework

- ENGL B1A Expository Composition 3 units at Bakersfield College or equivalent course at another accredited college.
- MATH BD/B70 Intermediate Algebra or higher 3 units at Bakersfield College or an equivalent course at another accredited college.
- CHEM B11 Introduction to General, Organic and Biochemistry or
- CHEM B1A General Chemistry at Bakersfield College or an equivalent Chemistry course (3-5 units) from another accredited college.
- BIOL B16 General Microbiology 5 units at Bakersfield College or equivalent course at another accredited college.
- BIOL B32 Anatomy & Physiology I 4 units at Bakersfield College or equivalent course at another accredited college.
- BIOL B33 Anatomy & Physiology II 4 units at Bakersfield College or equivalent course at another accredited college.

Anatomy and Physiology requirement can also be met with Human Anatomy (min. of 4 units) AND Human Physiology (min. of 4 units) of equivalent courses from another accredited college.

- Social Science (3 units) – any course listed in Area D3 of the Bakersfield College General Education Pattern
- Arts, Literature, Philosophy, and Foreign Language (3 units) – any course listed in Area C of the Bakersfield College General Education Pattern.
- COMM B1*
- ANTHB2* or SOC B1*
- PSYC B1A*
- Physical Education (1 unit) required from PHED courses numbered from B2-B33 or B49.
- HLED Health Education (3 units) is waived for RN students

- NURS B100 Educational Planning - recommended or any course listed under Bakersfield College General requirements for graduation. (A student development course is recommended to be taken during the first semester of courses at Bakersfield College to assure priority registration.)

### Career Opportunities:
Employment in a variety of healthcare facilities and settings

### Total Units: 20

#### Required Courses

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS B25</td>
<td>Mental Health - Psychiatric Nursing</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>NURS B26</td>
<td>Medical Surgical Nursing 3</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>NURS B70</td>
<td>Role Transition: Bridging Nursing Theory to Practice</td>
<td>2.0</td>
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<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>NURS B28</td>
<td>Medical Surgical Nursing 4</td>
<td>7.0</td>
<td></td>
</tr>
<tr>
<td>NURS B29</td>
<td>Gerontology - Community Nursing</td>
<td>2.0</td>
<td></td>
</tr>
</tbody>
</table>

More information can be found on the Allied Health website at www.bakersfieldcollege.edu/allied-health or in the Bakersfield College Allied Health Office, MS 178.

Pursuant to SB 1393, a student of a registered nursing program with a baccalaureate degree from a regionally accredited institution is not required to complete any coursework other than that which is unique and exclusively required to earn a nursing degree from that institution. All course work must meet the graduation requirements and licensure eligibility requirements as set forth by the Board of Registered Nursing.
LVN to Non-Degree Nurse (30 Unit Option)

Certificate of Achievement

Students seeking information regarding the 30-unit option preparation for the registered nurse licensing examination may receive further information from the Dean of the Associate Degree Nursing Program. The 30 unit option is specific to California only. As a 30 unit option you are not a graduate of Bakersfield College's Nursing Program.

Transfer and Challenge by Exam Policy
For transfer and challenge by exam policies, contact the Nursing Department for further information.

Career Opportunities in Registered Nursing
Employment in a variety of healthcare facilities and settings.

Prerequisite Requirements
All prerequisite courses must be completed prior to submission of program application. Courses in-progress at the time of application will not be considered.
The following courses must be completed with a grade of 'C' or higher:
• Introductory Physiology (with lab) must meet Board of Registered Nursing requirements in Physiology.
• General Microbiology (with lab) must meet Board of Registered Nursing requirements in Microbiology.

Additional Prerequisites:
• Graduation from high school or an equivalent education.
• Possession of a current California Vocational Nurse License.
• Employment as a LVN for at least 1 year.
• IV Certification.

30 Unit Option Curriculum*

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS B25</td>
<td>Mental Health-Psychiatric Nursing</td>
<td>3.5</td>
</tr>
<tr>
<td>NURS B26</td>
<td>Medical Surgical Nursing 3</td>
<td>5.5</td>
</tr>
<tr>
<td>NURS B70</td>
<td>Role Transition: Bridging Nursing</td>
<td>2.0</td>
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<tr>
<td></td>
<td>Theory to Practice</td>
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Third Semester

Fourth Semester

<table>
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<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>NURS B28</td>
<td>Medical Surgical Nursing 4</td>
<td>7.0</td>
</tr>
<tr>
<td>NURS B29</td>
<td>Gerontology - Community Nursing</td>
<td>2.0</td>
</tr>
</tbody>
</table>

*The prerequisites of microbiology and physiology equal 10 units.

Pursuant to SB 1393, a student of a registered nursing program with a baccalaureate degree from a regionally accredited institution is not required to complete any coursework other than that which is unique and exclusively required to earn a nursing degree from that institution. All course work must meet the graduation requirements and licensure eligibility requirements as set forth by the Board of Registered Nursing.
Nurse Assistant Job Skills Certificate

The Nurse Assistant job skills certificate prepares the student to provide services to those who need health care. The student will learn the role of the caregiver, the healthcare environment, health care safety, adult needs in health and illness, and basic caregiving skills.

The mission of the Bakersfield College Nurse Assistant Program is to provide vocational education that will prepare the student to provide basic services to those who need healthcare. The program is committed to improving and advancing the health and welfare of our community by preparing competent, safe, health care professionals.

Program Learning Outcomes
Upon successful completion, the student will demonstrate an understanding of knowledge and skills necessary to provide basic patient care including but not limited to the following skills:

- performing basic hygiene • taking and documenting vital information (vital signs, height, weight)
- documenting patient care
- assisting with elimination needs
- collecting specimens
- demonstrate an understanding of effective communication and interpersonal skills
- promote the independence of patients
- demonstrate an understanding of protection of patient privacy and patient rights
- demonstrate an understanding of safety and emergency procedures including the Heimlich maneuver

Requirements for the Nurse Assistant (JSC) program:
Conditional Enrollment: As a condition of enrollment in any Nursing/Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student's expense). Please note the following:

- A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render student ineligible for clinical placement, as determined by the clinical agencies.
- If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the Program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.
- A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and mask fit testing are also required and are performed at the student's expense.

Program Costs
An estimated cost for the program (fees, textbooks, uniforms, and examination) is approximately $1,000. Financial aid may be available.

Program Approval Accreditation
The California Department of Public Health approves the Bakersfield College Nurse Assistant Program. The Western Association of Schools and Colleges accredits Bakersfield College.

Licensure/Certification Eligibility
Students with a misdemeanor and/or felony arrest conviction, either current or prior, may not receive certification or licensure from the State or County. Also, a Social Security number and fingerprinting are required by State certification/licensure agencies.

Licensure/Certification
Upon successful completion of the Nurse Assistant course, the student is eligible to take the competency exam for a Certified Nurse Assistant administered by the American Red Cross. This job skills certificate provides proof to the California Department of Public Health that the student has met the requirements for licensure. Students must complete the required courses with at least a 'C' grade.

Career Opportunities:
Employment as a Licensed Vocational Nurse can be in a variety of health care settings.

Total Units: 6.0

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MEDS 669</td>
<td>Nurse Assistant</td>
<td>6.0</td>
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More information can be found on the Allied Health website at www.bakersfieldcollege.edu/allied-health or in the Bakersfield College Allied Health Office, MS 178.

Pursuant to SB 1393, a student of a registered nursing program with a baccalaureate degree from a regionally accredited institution is not required to complete any coursework other than that which is unique and exclusively required to earn a nursing degree from that institution. All course work must meet the graduation requirements and licensure eligibility requirements as set forth by the Board of Registered Nursing.
Vocational Nursing Program
Certificate of Achievement

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a 'C' grade in each course, the student will be awarded a Vocational Nursing Certificate of Achievement.

Vocational Nursing Program Mission
The mission of the Bakersfield College Vocational Nursing Program is to prepare entry-level vocational nurses as providers of care across the health/illness continuum and as members within the profession.

Upon completion of the program of study for Vocational Nursing, the student is eligible for a Certificate of Achievement.

Estimated Program Costs (Gainful Employment):
The estimated cost for the entire program is approximately $5,910. (This includes tuition for Nursing courses only.) For information on Estimated Program Costs (and program information), please visit our website at: https://www.bakersfieldcollege.edu/nursing/vn

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate an understanding of how to use and practice basic assessment (data collection), participate in planning, execute interventions in accordance with the care plan or treatment plan, and contribute to evaluation of individualized intervention related to the care plan or treatment plan.

Perform direct patient/client care by which the student:
• performs basic nursing services.
• administers medications.
• applies communication skills for the purpose of patient/client care and education.
• contributes to the development and implementation of a teaching plan related to self-care for the patient/client.

Requirements for the Vocational Nursing Program:
Requisite Requirements
All prerequisites must be completed prior to the start of the Program with a C grade or higher. Priority is provided to students with all prerequisite courses completed at the time of submitting an enrollment form.
• Proof of graduation from high school or an equivalent education.
• BIOL B18 (Essentials of Human Anatomy and Physiology) at Bakersfield College or an equivalent course at another accredited college.
• PSYC B1A (General Psychology) at Bakersfield College or an equivalent course at another accredited college.
• MATH B60 (Elementary Algebra) at Bakersfield College or an equivalent course at another accredited college.
• Eligibility for ENGL B1A (Expository Composition) as demonstrated by qualifying scores on the college assessment test or completion of ENGL B53 or ENGL B50 at Bakersfield College or equivalent course from another accredited college with a C or higher.
• Nurse Assistant certification – required (Effective Fall 2016).
• MEDS B60 (Medical Terminology) – highly recommended.

Note: Students desiring to continue their education and become a registered nurse need to refer to the prerequisites required for the Associate Degree Nursing Program.

Application Procedure
The Allied Health office must receive all application forms and transcripts during the designated filing periods. For detailed information on the application period and procedures, please refer to the Allied Health web site at www.bakersfieldcollege.edu/allied-health or in the Bakersfield College Allied Health Office in MS 178.

Conditional Enrollment
As a condition of enrollment in any Nursing/Allied Health Program, students are required to submit to and pass a designated drug and alcohol screening, a background screening, and physical examination clearance (at the student’s expense). Please note the following:
• A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render student ineligible for clinical placement, as determined by the clinical agencies.
• If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.
• A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and mask fit testing are also required and are performed at the student’s expense.

Program Costs
An estimated cost for the first semester of the program is approximately $3,200.

Transfer and Challenge by Exam Policy
For transfer and challenge by exam policies, contact the Nursing Department for further information.

Program Approval/Accreditation
The California Board of Vocational Nursing and Psychiatric Technicians accredits the Bakersfield College Vocational Nursing Program. The Western Association of Schools and Colleges accredits Bakersfield College.
**Licensure/Certification Eligibility**
Conviction of any offenses other than minor traffic violations must be reported to the Board of Vocational Nursing and Psychiatric Technicians at the time of application for licensure. For clarification contact the VN Program Director or the Board of Vocational Nursing and Psychiatric Technicians, 2535 Capitol Oaks Drive, Suite 205, Sacramento, California, 95833, (916) 263-7800. Applicants for VN Licensure must submit a valid Social Security number at the time of application.

**Certificate of Achievement**
Upon completion of the program of study for Vocational Nursing, the student is eligible for a Certificate of Achievement.

**Career Opportunities:**
Employment as a Licensed Vocational Nurse can be in a variety of health care settings. Additional employment information can be found online at: https://www.onetonline.org/link/summary/29-2061.00

**Vocational Nurse Program Curriculum**
The following courses are taken after the student enters the Vocational Nursing Program

**Total Units: 44**

**Required Courses**

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<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>VNRS B67</td>
<td>Principles of Pharmacology</td>
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<tr>
<td>VNRS B68</td>
<td>Basic Medical Surgical Nursing</td>
<td>3.0</td>
</tr>
<tr>
<td>VNRS B69</td>
<td>Foundations for Vocational Nursing Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>VNRS B69L</td>
<td>Foundations for Vocational Nursing Practice – Lab</td>
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**First Semester - 14 units**

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<th>Course #</th>
<th>Name</th>
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<tbody>
<tr>
<td>VNRS B79</td>
<td>Intermediate Medical Surgical Nursing</td>
<td>9.0</td>
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<tr>
<td>VNRS B79L</td>
<td>Intermediate Medical Surgical Nursing – Lab</td>
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**Second Semester - 15 units**

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<th>Course #</th>
<th>Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>VNRS B83</td>
<td>Critical Thinking and Leadership for the Vocational Nurse</td>
<td>1.5</td>
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<tr>
<td>VNRS B84</td>
<td>Maternal/Child Pharmacology</td>
<td>1.0</td>
</tr>
<tr>
<td>VNRS B88</td>
<td>Maternal/Child Nursing</td>
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<tr>
<td>VNRS B88L</td>
<td>Maternal/Child Nursing – Lab</td>
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</tr>
<tr>
<td>VNRS B89</td>
<td>Advanced Medical Surgical Nursing</td>
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<td>VNRS B89L</td>
<td>Advanced Medical Surgical Nursing – Lab</td>
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</table>

Pursuant to SB 1393, a student of a registered nursing program with a baccalaureate degree from a regionally accredited institution is not required to complete any coursework other than that which is unique and exclusively required to earn a nursing degree from that institution. All course work must meet the graduation requirements and licensure eligibility requirements as set forth by the Board of Registered Nursing.
Paramedic

Degree
Paramedic Program, Associate of Science

Certificates
Paramedic Program, Certificate of Achievement
Paramedic Program
Associate of Science Degree

The mission of the Paramedic Program is to provide a strong educational foundation so the future paramedics may improve the health and welfare of Kern County by providing the highest quality prehospital emergency medical care. The Paramedic Program is designed to provide students with the education and experience to perform as competent, entry level Paramedics. The Paramedic Program received its initial accreditation by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP) on March 17, 2006. The program has received continuing accreditation by CAAHEP and is approved by Kern County Emergency Medical Services as meeting the EMS Education Standards as specified in Title 22 of the California Code of Regulations and the National Highway Transportation and Safety Administration (NHTSA) Paramedic Curriculum. The program consists of a minimum of 1090 hours of instruction which is divided into three distinct sessions: didactic/classroom instruction (minimum of 450 hours) clinical lab (minimum of 160 hours) and field internship (minimum of 480 hours). Upon completion of the program, graduates will earn an Associate Degree and are eligible to take the National Registry Emergency Medical Technician - Paramedic examination (NREMT-P) which is required for paramedic licensure in the state of California.

Program Learning Outcomes
Upon successful completion, the EMT-Paramedic student will:

- demonstrate the ability to comprehend, apply, and evaluate the clinical information relative to the role of an entry level paramedic. Assessment: Written exams, verbal reports.
- demonstrate technical proficiency in all skills necessary to fulfill the role of the entry level paramedic. Assessment: Skill competency demonstrations, successful completion of field internship.
- demonstrate personal behaviors consistent with professional and employer expectations for the entry level paramedic. Assessment: Effective assessment tool, successful completion of field internship.

Requirements for the Paramedic (AS) program:

Application Procedures:
Seats are limited, therefore, in order to be fully eligible for enrollment into the Paramedic Program, it is the student's responsibility to make sure that the following is completed prior the end of the application period held in the month of March:

- Fill out an application form obtained from the BC Paramedic Program website, or from the Fire Tech office located in room 125 at the Weill Institute (2100 Chester Avenue).
- Provide proof of high school completion (diploma or high school transcript) or GED – general education equivalent.
- Provide a copy of current valid EMT card (State of California EMT and/or NREMT).
- Provide a copy of a current American Heart Association Healthcare Provider CPR card.
- Provide a copy of California driver's license.

Health Requirements and Screenings
After a student receives notification of enrollment into the Program and as a condition of enrollment students must complete all of the following:

- Background Check - As a condition of enrollment into any Allied Health Program with a clinical laboratory component, students are required to submit to and pass a designated background screen. Please note the following:
  - A history of legal conviction(s), or any other convictions which bar a person from participation in a federal program, could render a student ineligible for clinical placement see section 100174 of California's Title 22 – Division 9, Chapter 4.
  - If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the Program.
  - In the event that a student cannot obtain a background clearance due to background restrictions, the space will be forfeited.
  - Students who are found to be ineligible for clinical placement by the clinical agency after admission to the radiography program shall be subject to dismissal from the Program, as they will be unable to complete mandatory clinical rotations.

- Drug/Alcohol Screening - As a condition of enrollment into any Allied Health Program with a clinical laboratory component, students are required to submit to and pass a designated drug and alcohol screening.

- Vaccinations / Immunizations / Titers – Students must show proof the appropriate immunizations /vaccinations have been obtained. More information as well as the appropriate forms can be found on the Allied Health web site at https://www.bakersfieldcollege.edu/allied-health.

- Mask Fit Test - The clinical education centers affiliated with Bakersfield College require all Nursing/Allied Health students to be fitted for a mask that will be used when treating patients with respiratory conditions such as pneumonia, tuberculosis, H1N1, flu, etc. The mask type is called N95 and comes in small and regular sizes. Students need to be properly fitted to determine which mask size best fits their facial anatomy. Testing of all students will be done annually as facial size may change. This test is mandatory for all students. For more information on the mask fit test, go to https://www.bakersfieldcollege.edu/allied-health.

- In the event that a student cannot obtain a background clearance due to background restrictions, the space will be forfeited.

- Provide a copy of a current American Heart Association Healthcare Provider CPR card.

- Provide a copy of California driver's license.

- Drug/Alcohol Screening - As a condition of enrollment into any Allied Health Program with a clinical laboratory component, students are required to submit to and pass a designated drug and alcohol screening.

- Vaccinations / Immunizations / Titers – Students must show proof the appropriate immunizations /vaccinations have been obtained. More information as well as the appropriate forms can be found on the Allied Health web site at https://www.bakersfieldcollege.edu/allied-health.

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- Physical Exam - A physical examination, must be completed by a physician or Nurse Practitioner/Physician Assistant of the student's choice using the college's forms. The Physical Exam, drug and alcohol screen, background screen, Immunizations, and health tests are performed at the expense of the student. The physical exam demonstrates the student is able to achieve the physical and technical
standards necessary to meet the Program’s objectives.

- CPR & AED Card – The student must possess a current American Heart Association BLS for Healthcare Providers (CPR & AED) card. This card must be provided at the start of the Program and be kept valid during the entire Program.

Limitation on Enrollment:
As a condition of enrollment in any Allied Health Program, students are required to submit to and pass a designated background check. Every student offered space in the program will be required to submit to a background screening as part of his or her clinical requirements for admission.

Please note the following:
- A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render a student ineligible for clinical placement, as determined by the clinical agencies.
- If a student cannot obtain background clearance from the clinical agencies and field internship agencies, it will not be possible to place the student in the clinical/internship areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency and/or field internship after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical/field internship rotations.
- A physical examination completed by a physician of the student’s choice is required after acceptance to the Program to demonstrate that a student meets the technical standards necessary to meet the Program objectives. Appropriate immunizations and/or vaccinations and mask fit testing are also required and are performed at the student’s expense.

Licensure/Certification Eligibility
Upon completion of the program students are eligible to take the National Registry of Emergency Medical Technicians examination for licensure as a paramedic. Conviction of any offenses other than minor traffic violations must be reported to the Sacramento Emergency Medical Services Authority of California at the time of application for licensure. Anyone who desires further clarification may contact the EMS Authority at (916) 322-4336.

Accreditation
The Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). The program is also approved by Kern County Emergency Medical Services as meeting the EMS Education Standards as specified in Title 22 of the California Code of Regulations and the National Highway transportation and Safety Administration (NHTSA) Paramedic Curriculum. The Western Association of Schools and Colleges accredits Bakersfield College.

To Achieve the Associate in Science Degree
Upon successful completion of the core requirements with a ‘B’ grade or better in each course AND successful completion of the General Education courses with a ‘C’ grade or better, the student will be awarded a Paramedic Associate in Science Degree.

Program Prerequisite Requirements
Emergency Medical Technician (EMT) course with current EMT card

Program Costs
An estimated cost for the program is $2000.

Career Opportunities:
Paramedics are typically employed by ambulance companies, private industry, and fire departments to provide emergency care in case of illness or injury. Median Hourly Earnings - $16.53/hr.

Total Units: 39.5

Required Courses
Course #  Name  Units

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<thead>
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<tr>
<td>Fall Semester</td>
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<td>Fall Semester</td>
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<tr>
<td>EMTC B17</td>
<td>Paramedic Field Internship</td>
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</table>

More information can be found on the Allied Health website at www.bakersfieldcollege.edu/allied-health or in the Bakersfield College Allied Health Office, MS 178.
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Program Learning Outcomes
Upon successful completion, the EMT-Paramedic student will:

- demonstrate the ability to comprehend, apply, and evaluate the clinical information relative to the role of an entry level paramedic. Assessment: Written exams, verbal reports
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- demonstrate personal behaviors consistent with professional and employer expectations for the entry level paramedic. Assessment: Effective assessment tool, successful completion of field internship

Requirements for the Paramedic (CA) program:
Application Procedures:
Seats are limited, therefore, in order to be fully eligible for enrollment into the Paramedic Program, it is the student’s responsibility to that the following is completed prior the end of the application period held in the month of February:

- Fill out an application form obtained from the BC Paramedic Program website, or from the Fire Tech office located in room 125 at the Weill Institute (2100 Chester Avenue).
- Provide proof of high school completion (diploma or high school transcript) or GED – general education equivalent
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**Limitation on Enrollment:**

As a condition of enrollment in any Allied Health Program, students are required to submit to and pass a designated background check. Every student offered space in the program will be required to submit to a background screening as part of his or her clinical requirements for admission. Please note the following:

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**Licensure/Certification Eligibility**

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**To Achieve the Certificate of Achievement**

Upon successful completion of the core requirements with a ‘B’ grade or better in each course, the student will be awarded a Certificate of Achievement.

**Program Prerequisite Requirements**

Emergency Medical Technician (EMT) course with current EMT card

**Program Costs**

An estimated cost for the program is $2000.

**Career Opportunities:**

Paramedics are typically employed by ambulance companies, private industry, and fire departments to provide emergency care in case of illness or injury. Median Hourly Earnings - $16.53/hr.

**Total Units: 39.5**

**Required Courses**

<table>
<thead>
<tr>
<th>Course #</th>
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</tr>
</thead>
<tbody>
<tr>
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More information can be found on the Allied Health website at www.bakersfieldcollege.edu/allied-health or in the Bakersfield College Allied Health Office, MS 178.
Physics

Degree
Physics, Associate of Science for Transfer
The goal of the program is to help students better understand the physical world and its analysis using both qualitative and quantitative reasoning based on mathematical techniques. The coursework prepares students to think critically and apply reasoning skills to analyze real world situations.

Students will be able to successfully transfer to any institution of higher learning armed with the foundation needed to pursue a baccalaureate degree in physics and will be prepared for careers as physicists in fields such as research, industry and education. Students will complete comprehensive curriculum to meet degree and transfer needs. This new degree builds upon the existing degree’s emphases in mathematical modeling, reasoning and critical thinking skills. In addition, it will guarantee transfer to a California State University in the physics major (or a similar or equivalent program).

The Associate in Science degree in Physics for Transfer is designed to prepare students to begin upper division course work in pursuit of a bachelor’s degree (or ultimately a graduate degree) in physics upon transfer to a four-year college or university. Earning this degree should allow the student to become acquainted with the basic knowledge of physics contained in a calculus-based introductory physics sequence and the mathematics that supports that level of competency. The student will demonstrate proficiency in communication, critical thinking, quantitative problem solving, and laboratory science skills. This degree represents a step in a path preparing students for careers in any of the many branches of physics, physics education, and other technical fields, such as some engineering disciplines in which physics is an integral part.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including the following:

- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
  - A minimum of 18 semester units in a major area of emphasis, as determined by the district.
  - The obtainment of a minimum grade point average of 2.0.
  - The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Students transferring to a CSU campus that does accept the AS-T will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit” major).

This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

Program Learning Outcomes
Upon successful completion, the student will:

- demonstrate a knowledge of and recognize the processes that explain physical phenomena.
- apply the methodologies of science when approaching a physics problem.
- apply logical quantitative and qualitative reasoning in solving physics problems or analyzing arguments.

Total Units: 24

Required Courses

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<tr>
<th>Course #</th>
<th>Name</th>
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<td>PHYS B4B</td>
<td>Heat, Electricity, Magnetism</td>
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<td>PHYS B4C</td>
<td>Optics and Modern Physics</td>
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<tr>
<td>MATH B6A</td>
<td>Analytic Geometry/Calculus I</td>
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<tr>
<td>MATH B6B</td>
<td>Analytic Geometry/Calculus II</td>
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<tr>
<td>MATH B6C</td>
<td>Calculus III</td>
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</table>

Category

- Units in Major 24
- CSU GE Breadth 37-39
- Possible double counting of GE’s 7
- Degree Total 60
Philosophy

Degree
Philosophy, Associate of Arts for Transfer
Philosophy
Associate of Arts Degree for Transfer

The Associate in Arts in Philosophy for Transfer degree is designed to provide students a clear transfer pathway to the CSU philosophy major and completion of the philosophy baccalaureate degree, to grant guaranteed admission to a CSU to a similar major, with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units. Philosophy has always been and continues to be one of the strongest traditional liberal arts majors in higher education. Some students major in Philosophy as a precursor to graduate work and academic careers, teaching and conducting research in Philosophy and Education. The emphasis on critical thinking, theories of knowledge, value and reality, truth, rational argument and proof make Philosophy an excellent pre-professional undergraduate major (e.g., for law, theology, medicine, business, computer science) or minor (e.g., for the natural, physical and social science and humanities majors).

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.
• The obtainment of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Program Learning Outcomes
Upon successful completion, the student will:
• explicate and evaluate arguments.
• explain major philosophical or religious ideas.
• defend personal positions on important philosophical issues.
• demonstrate clear writing and speaking about philosophical or religious ideas.

Total Units: 18

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<th>Name</th>
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<td>PHIL B7</td>
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<td>PHIL B6A</td>
<td>Introduction to Philosophy</td>
<td>3.0</td>
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<tr>
<td>PHIL B10</td>
<td>Introduction to Ethics</td>
<td>3.0</td>
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List A - Select 3 units from the following or any Required Core course not already used
PHIL B18 History of Ancient Philosophy 3.0

List B - Select 6 units from the following or any List A course not already used
HIST B4A European Civilization 3.0
HIST B4B European Civilization 3.0

List C - Select 3 units from the following or any List A or B course not already used
PHIL B9 Critical Thinking and Advanced Composition 3.0
PHIL B12 Ethics of Living and Dying 3.0

Category | CSU | IGETC |
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Political Science

Degree
Political Science, Associate of Arts for Transfer
Political Science
Associate of Arts Degree for Transfer

The Associate in Arts in Political Science for Transfer degree is designed for students interested in gaining an understanding of the structure and functions in governments. This degree provides a foundation for further study for students planning to transfer into a baccalaureate program in political science. Successful completion of the Associate in Arts in Political Science for Transfer degree guarantees the student acceptance to a California State University (but not to a particular campus) to pursue a baccalaureate degree in Political Science. This degree may not be the best option for students intending to transfer to a particular CSU campus or a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The obtainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Total Units: 19

**Required Core Courses**

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<td>POLS B1</td>
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**List A - Select 10 units from the following:**

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<th>Course #</th>
<th>Name</th>
<th>Units</th>
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<tr>
<td>POLS B2</td>
<td>Comparative Government and</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>International Politics and</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics or</td>
<td>4.0</td>
</tr>
<tr>
<td>PSYC B5</td>
<td>Elementary Statistics for the Behavioral and Social Sciences</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**List B - Select 6 units from the following:**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS B12</td>
<td>Contemporary Issues in California State and Local Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS B16</td>
<td>Vital Political Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B4A</td>
<td>European Civilization</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B4B</td>
<td>European Civilization</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B17A</td>
<td>History of the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B17B</td>
<td>History of the United States since 1870</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST B18</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON B2</td>
<td>Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Category**

- Units in Major: 19.0
- CSU GE Breadth: 37.0-39.0
- Possible double counting of GE’s: 12.0-15.0
- Degree Total: 60.0

**Program Learning Outcomes**
Upon successful completion, the student will:
- demonstrate their understanding of the relevance of state and local politics, determining and developing an objective appraisal of major trends in social, economic, and political life.
- evaluate the power relationships between legislative, executive and judicial branches of government.
- compare and contrast the factors that determine the emergence of republican or authoritarian systems of governance.
- evaluate the influence of conflict and cooperation in the international bargaining process.
Psychology

Degree
Psychology, Associate in Arts for Transfer
Psychology
Associate in Arts Degree for Transfer

The Associate in Arts in Psychology for Transfer is intended for those transfer-directed students who plan to complete an Associate of Arts in Psychology because it guarantees admission to the CSU system (but not to a particular campus or major). In order to earn the Associate in Arts in Psychology for Transfer, students must complete a minimum of 60 required semester units of CSU-transferable coursework which includes the CSU General Education or IGETC requirements with a minimum GPA of 2.0.

Students transferring to a CSU campus that does accept the Associate in Arts in Psychology for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated high-unit major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

The major in psychology provides a study of the behavior of individuals and groups. The four-year degree in this major contributes to the foundational knowledge for positions in research and teaching, counseling, and working in clinical settings.

To Achieve the Associate in Arts for Transfer

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Psychology Associate in Arts for Transfer degree.

To Transfer Coursework

A minimum of 21 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including the following:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.
• The obtainment of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. This degree eliminates the additional Bakersfield College graduation requirements.

Program Learning Outcomes

Upon successful completion, the student will:
• demonstrate an understanding of the major concepts of behavior, theoretical perspectives, empirical findings, and historical trends in psychology.
• demonstrate an understanding of basic research methods and information competency in obtaining relevant information about the science and profession of psychology.
• exhibit an awareness of the ethical and professional factors related to the diversity of individuals and groups within the discipline of psychology.

Total Units: 20

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td><strong>11 units</strong></td>
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<tr>
<td>Course #</td>
<td>Name</td>
</tr>
<tr>
<td>PSYC B5</td>
<td>Elementary Statistics for the Behavioral and Social Sciences or Elementary Probability and Statistics</td>
</tr>
<tr>
<td>MATH B22</td>
<td>General Psychology</td>
</tr>
<tr>
<td>PSYC B6</td>
<td>Research Methods for the Behavioral and Social Sciences</td>
</tr>
<tr>
<td></td>
<td><strong>List A: Select 3 units</strong></td>
</tr>
<tr>
<td>PSYC B1B</td>
<td>Biological Psychology</td>
</tr>
<tr>
<td></td>
<td><strong>List B: Select 3 units</strong></td>
</tr>
<tr>
<td>PSYC B20</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSYC B40</td>
<td>Introduction to Lifespan Psychology</td>
</tr>
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</table>

List C: Select 3 units

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC B30</td>
<td>Human Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B33*</td>
<td>Psychology of Personal and Social Adjustment</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Category

<table>
<thead>
<tr>
<th>Category</th>
<th>CSU</th>
<th>IGETC</th>
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</thead>
<tbody>
<tr>
<td>Units in Major</td>
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<td>20</td>
</tr>
<tr>
<td>Possible double counting of GE’s</td>
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<td>14</td>
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<tr>
<td>General Education</td>
<td>39</td>
<td>37</td>
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<tr>
<td>Electives (CSU Transferrable)</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>
Public Health Science

**Degree**
Public Health Science, Associate of Science for Transfer
Public Health Science
Associate of Science Degree for Transfer

The Associate in Science in Public Health Science for Transfer focuses on disease and injury prevention strategies for community and individual wellness. The Associate in Science in Public Health Science for Transfer is designed to provide students a clear transfer pathway to the CSU within the health science field major and the completion of baccalaureate degree, with guaranteed admission to a CSU to a similar major with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

Additionally, the Associate in Science in Public Health Science for Transfer focuses on providing job related and introduction to the various career pathways within this field. The public health field includes disciplines such as patient health navigator, health education outreach, epidemiology, biostatistics, health services, environmental health, behavioral health, and occupational health. Skill competencies include knowledge of public health models, health risk assessments, health screenings, health promotion programming, and surveillance of disease outbreaks in a community.

Requirements for the Associate of Arts Degree for Transfer:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- The obtaining of a minimum grade point average of 2.0.

Total Units: 32

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PBHS B21</td>
<td>Personal Health and Wellness</td>
<td>3.0</td>
</tr>
<tr>
<td>PBHS B20</td>
<td>Introduction to Public Health</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B11</td>
<td>Concepts of Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM B2A</td>
<td>Introduction to General Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>PSYC B1A</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL B32</td>
<td>Human Anatomy and Physiology I</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL B33</td>
<td>Human Anatomy and Physiology II</td>
<td>4.0</td>
</tr>
</tbody>
</table>

List A: Select 3 units from the following:
- ECON B1  Principles of Microeconomics - Micro  3.0
- ECON B2  Principles of Macroeconomics - Macro  3.0
- PSYC B30 Human Sexuality                      3.0
- PBHS B23 Health and Social Justice           3.0
- PBHS B22 Drugs, Health and Society           3.0
- SOCI B1 Introduction to Sociology           3.0

- The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate the ability to comprehend, apply the multidimensional approach of public health sciences.
- identify proactive factors for disease prevention and risk factors for disease and disability.
- demonstrate and apply behavior-changing techniques to maximize health and wellness.
- demonstrate the concepts of research, program planning and evaluation strategies.
Radiologic Technology

Degree
Radiologic Technology, Associate of Science

Certificates
Principles of Venipuncture, Job Skills Certificate
Principles of Fluoroscopy, Job Skills Certificate
Radiologic Technology
Associate of Science Degree

Radiologic Technology is a health care profession whose practitioners work in hospitals, imaging centers, and private physicians' offices. The radiologic technologist (radiographer) is a member of the health care team who works directly with the patient and the physician performing a wide variety of diagnostic x-ray procedures. The role of the graduate radiographer may be that of staff radiographer, special imaging radiographer, supervisor, administrator or educator, depending upon the level of education and experience obtained.

The Bakersfield College Associate in Science degree Radiologic Technology Program provides concurrent didactic and clinical education. The program is 24 months in length (excluding prerequisite coursework) and begins each year in June. Students should anticipate making a full time commitment to the program during the school year. Summer sessions are required and semester/ terms may be scheduled beyond the regular college session dates. The Program is primarily scheduled during the day; however an evening clinical rotation will be completed during the second year of the program. Clinical education sites include hospitals and imaging centers located in Bakersfield, California and Delano, California. Students may be assigned to any clinical education center in any geographical location and must provide their own transportation to these centers.

The program provides the theory, skill and experience necessary to apply for admission to the licensure exam administered by the American Registry of Radiologic Technologists; and for certification from the State of California, Department of Public Health, Radiologic Health Branch, as a Certified Radiologic Technologist. The student is also eligible to write the State Fluoroscopy Permit exam. Students must earn a minimum grade of ‘C’ in all radiography courses, have met the State mandated curriculum and clinical hours, met all clinical education competencies and earned the Associate in Science degree to be recommended for these examinations/certifications. For program information, brochure and enrollment application form, consult the following website at www.bakersfieldcollege.edu/allied-health/radtech.

Program Mission
The mission of the Bakersfield College Radiologic Technology Program is to promote student success by providing quality instruction for graduates to competently practice radiography at the entry level.

Program Learning Outcomes
Upon successful completion, the student will:

1. be clinically competent.
   - apply positioning skills.
   - select exposure factors.
   - utilize radiation protection.
   - demonstrate and employ knowledge of equipment operation.

2. develop critical thinking skills.
   - demonstrate the ability to formulate technical factors.
   - adapt standard procedures for non-routine patients.
   - demonstrate independent judgment.
   - critique images to determine diagnostic quality.

3. communicate effectively.
   - demonstrate effective communication.
   - use correct pronunciation.

4. model professionalism.
   - demonstrate knowledge of professional imaging organizations.
   - summarize the value of life-long learning.
   - demonstrate work ethics.

5. the Program will graduate entry-level radiographers.
   - Program graduates will pass the ARRT exam on the 1st attempt.
   - Graduates seeking employment will obtain employment within 12 months of graduation.
   - Students will successfully complete each course.
   - Students will successfully complete the program.
   - Graduates will be satisfied with their education.
   - Employers will be satisfied with graduate performance.

Requirements for the Radiologic Technology (AS) program:

Enrollment Procedures and Application Filing Period
Application forms and all required documents must be received by the Radiologic Technology Program Office during the application month of February. Late applications will not be accepted.

Application Procedures:
It is the student’s responsibility to ensure that the following items are completed prior to the end of the application period held in the month of February:

   * Complete required prerequisite courses (see list).
   * Obtain application form from the Allied Health Department located in Room 178 of the Math-Science Building on the main campus, or on the Allied Health website at www.bakersfieldcollege.edu/allied-health/radtech.
   * Arrange for an official copy of your high school transcript to be mailed directly to the: Radiologic Technology Program, Bakersfield College, 1801 Panorama Drive, Bakersfield, CA 93305. An official copy of High School Equivalency (GED) is required if your high school transcript does not identify graduation.
   * If you are a Bakersfield College Student with no college courses other than BC courses: Provide the Program with an unofficial Bakersfield College transcript from the college website or an unofficial transcript from the Admissions & Records Office.
   * If you have taken courses from any college other than Bakersfield College:
     - Apply for admission to Bakersfield College either in
person or online at www.bakersfieldcollege.edu and click on Admissions & Records. Follow the information under Enrolling.
• Have your college transcript(s) evaluated by:
• Ordering an Official copy of your transcripts from your previous college(s);
• Submit the Official copy of your transcripts along with a form “Request for Evaluation”. You can obtain this form from the Admissions and Records office or from the Admissions and Records web-page.
• Once your transcripts have been evaluated and posted to your Bakersfield College transcripts, either order an official copy to be sent from the Admission and Records office or print your unofficial transcript and submit along with the Application Form to the Radiologic Technology Program during the application filing period during the month of February. If you have taken courses from Porterville or Cerro Coso Community College, you only need to submit the “Request for Evaluation” form. You do not need official copies of transcripts from Porterville or Cerro Coso Community College
• Late application materials will not be considered for the current application period. Applicants are responsible for ensuring that their application is complete. The Program is not responsible for late materials or incomplete applications. The application must be thoroughly complete and signed to be considered for eligibility.
• Students on the waitlist must reapply annually during the enrollment month of February. This is required every year to keep the applicant’s file current. If the student does not reapply, the student will be removed from the waitlist.

Conditional Enrollment:
As a condition of enrollment in any Allied Health Program, students are required to submit to and pass a designated background check. Every student offered space in the program will be required to submit to a background screening as part of his or her clinical requirements for admission. Please note the following:
• A Physical examination will be required after the students receive notification of enrollment into the program to demonstrate that a student meets the technical standards necessary to meet the objectives of the program. A copy of the Essential Technical Standards required for Radiologic Technologists may be obtained in the Allied Health Division Office located in the Math-Science building, room 178 or on the program website at www.bakersfieldcollege.edu/allied-health.
• As a condition of enrollment to the Radiologic Technology Program, all students are required to submit to and pass a designated drug and alcohol screen.
• A history of felony conviction(s) or any bar, exclusion or other ineligibility for federal program participation could render student ineligible for clinical placement, as determined by the clinical agencies.
• If a student cannot obtain background clearance from the clinical agencies, it will not be possible to place the student in the clinical areas, which is a required component of the program. In the event that a student cannot obtain a background clearance, the space will be forfeited. Students who are found to be ineligible for clinical placement by the clinical agency after admission to the program shall be subject to dismissal from the program, as they will be unable to complete mandatory clinical rotations.
• Immunizations/health tests are needed for acceptance in a clinical education center and to protect the health and welfare of the student and community. Immunizations may include, but not be limited to, rubella, varicella, Hepatitis B, and Tuberculosis screening and the seasonal flu vaccine is also required.
• The medical exams, drug/alcohol screens, background screen, immunizations and tests are performed at the expense of the student.
• The student must possess a current Basic Life Support/ CPR (cardiopulmonary resuscitation) card by the American Health Association (Healthcare Provider card). This card must be provided at the start of the program and be kept valid during the entire 24-month program.

General Education Requirements:
General education courses are required to graduate from the Bakersfield College Associate in Science Degree Radiologic Technology Program. It is suggested that these courses be completed prior to program enrollment. Refer to the Bakersfield College General Education and Graduation Requirements in the Graduation Requirements in the college catalog (www.bakersfieldcollege.edu) for more specific information and requirements for the college (the list below does NOT identify all requirements). All students are encouraged to regularly check the college requirements for graduation and/or meet with a Counselor to ensure that AS degree requirements will be met at the end of the Radiography Program. Completion of the AS Degree is required to meet eligibility requirements for certification and licensure. Courses must be completed with a “C” grade or better
• Oral Communication (3 units); COMM B1 recommended; Any course listed in Area A.1 of the Gen Ed Pattern in BC Catalog
• Written Communication (3 units); ENGL B1A– prerequisite course
• Physical Universe and Life Forms (6 units)
• Natural Sciences (4-8 units); BIOL B18 or BIOL B32 & BIOL B33 (prerequisite course)
• Mathematics and Logic (3-5 units); MATH B70 (5 units) -prerequisite course
• Arts, Literature, Philosophy, and Foreign Language (3 units); PHIL B12 recommended or any course in Area C: Gen Ed Pattern in the BC Catalog
• Social, Political, Legal and Economic Institution & Behavior, Historical Background (6 units)
Radiologic Technology
Associate of Science Degree  (Cont.)

• Foundations in the Behavioral Sciences (3 units); Any course listed in Area D.1 of the Gen Ed Pattern in the BC Catalog or Foundations in the Social Sciences (3 units); Any course listed in Area D.2 of the Gen Ed Pattern in the BC Catalog and American (U.S. Institutions) (3 units); Any course listed in Area D.3 of the Gen Ed Pattern in the BC Catalog.
• Lifelong Understanding and Self-Development (4 units)
• Physical Education 1 unit required from PHED courses listed in the BC catalog. (Rad Tech students are exempt from the 3 unit course in the lifelong understanding development category)
• Educational Planning; STDV B1 recommended or any course listed in the BC Catalog General Requirements (Recommended to be taken during the first semester of courses at BC to assure priority registration.)
• Computer Studies (3 units); COMP B2 or COMP B5 or equivalent is necessary to meet Radiologic Technology Program completion.

Radiologic Technology Program Prerequisite Requirements:
All prerequisite coursework must be completed prior to applying for the Radiologic Technology Program. Students are strongly encouraged to complete prerequisite courses prior to enrolling in general education courses. This will improve a student’s opportunity to apply for program enrollment. The following prerequisite courses must be completed with a C grade or higher.
• BIOL B18 (Essentials of Anatomy and Physiology) or BIOL B32 (Human Anatomy and Physiology I) and BIOL B33 (Human Anatomy and Physiology II) or Equivalent course(s) at another accredited college.

Note: BIOL B14 (Human Anatomy) and BIOL B15 (Human Physiology) were previously taught at Bakersfield College and they meet this requirement.
• MATH BD/B70 (Intermediate Algebra-5 units) at Bakersfield College or equivalent course at another accredited college. A higher level college math course will be accepted in lieu of this algebra requirement.
• MEDS B60 (Medical Terminology - 3 units) at Bakersfield College or equivalent course at another accredited college.
• ENGL B1A (Expository Composition - 3 units); or an equivalent course at another accredited college.
• Minimum cumulative grade point average of 2.7 with MATH BD/B70 passed on the first attempt; or Minimum cumulative grade point average of 2.9 with MATH BD/B70 passed on the second attempt.

Note: All course attempts including grades of ‘D’, ‘F’ and withdrawals (W) are included in the review of the course attempts. Students with more than two math attempts are not initially eligible for the program. In addition, for students who use a higher level math course in lieu of Intermediate Algebra these same requirements for minimum cumulative grade point average and course attempts apply in order to meet program prerequisites.

Remediation Plan: Students who do not initially meet the eligibility requirement for passing the MATH BD/MATH B70 prerequisite within two attempts must complete all of the following remediation requirements to be considered eligible to apply for the Radiologic Technology Program.
• Completion of ACDV B70A-B70F- Study Skills courses with a grade of ‘B’ or better.
• Completion of MATH B22 Elementary Probability and Statistics with a minimum grade of ‘C’ on the first course attempt.
• Successful completion of the Remediation Program must be completed within 1 year of initial application to the program. Students who do not meet the grade point average (GPA) eligibility requirement of either 2.7 or 2.9 are advised to research and complete, if applicable, an Academic Renewal request through the Bakersfield College established process identified in the college catalog for a recalculation of their GPA. Documentation of completion of the remediation plan must be submitted to the Program at the time of application. Documentation is made through college transcripts.
• Graduation from high school or an equivalent education.

Estimated Program Costs (Gainful Employment):
Students will be required to purchase uniforms, textbooks, and supplies, pay current college fees and provide transportation to off campus clinical education centers in Bakersfield, California and Delano, California. For information on Estimated Program Costs, please visit our website at: http://www.bakersfieldcollege.edu/allied-health/ radtech

Licensure/Certification Eligibility:
The American Registry of Radiologic Technologists (ARRT) requires review of any conviction, misdemeanor or felony, or a sanction by the Program regarding an academic honor code, or review of suspension or dismissal by a radiography program and review of licensure suspension, denial or other disciplinary action by a regulatory authority or certification board other than the ARRT. This review may be conducted prior to or during the program. For more information contact the ARRT at: 1225 Northland Drive, Mendota Heights, MN 55120, (651) 687-0048, or www.arrt.org. The State Department of Public Health, Radiologic Health Branch and the American Registry of Radiologic Technology requires possession of either a Social Security number or Taxpayer ID number to apply for licensure and/or registration.

Accreditation:
Bakersfield College is accredited by the Western Association of Schools and Colleges. The Radiologic Technology Program is accredited by the Joint Review Committee on Education.
Career Opportunities:
The AS Degree Radiologic Technology prepares graduates for
both State licensure and national certification in radiography. Employment outlook is excellent for radiographers with a median salary of $32/hr for Kern and Tulare Counties (2015) with an 8.6% increase in projected openings from 2016-2021.

Radiologic Technology Associate in Science Degree
The following courses are taken after students have been enrolled
in the Radiologic Technology Program. To Achieve the Associate
in Science Upon completion of the following courses with at
least a ‘C’ grade in each course, the student will be awarded a Radiologic Technology Associate in Science degree.

More information can be found on the Allied Health website at: www.bakersfieldcollege.edu/allied-health/radtech or in the Bakersfield College Allied Health Office, MS 178.

Total Units: 63.5
Required Courses
Course #     Name                          Units
First Summer Semester
RADT B1A   Introduction to Radiologic Technology   2.0
RADT B1B   Patient Care                            2.0
RADT B4A   Introduction to Clinical Education      1.5
First Fall Semester
RADT B2A   Radiographic Anatomy and Positioning 1  3.0
RADT B3A   Radiographic Principles 1               3.0
RADT B4B   Clinical Education 1                    4.0
RADT B12   Radiobiology and Radiation Protection  2.0
First Spring Semester
RADT B2B   Radiographic Anatomy and Positioning 2  3.0
RADT B3B   Radiographic Principles 2               3.0
RADT B6    Clinical Education 2                    5.0
General Education (if needed)                      3.0
Second Summer Semester
RADT B7    Clinical Education 3                    6.5
Second Fall Semester
RADT B2C   Radiographic Anatomy and Position 3     3.0
RADT B5    Radiation Physics                       3.0
RADT B10   Clinical Education 4                    7.0
Second Spring Semester
RADT B9A   Sectional Anatomy for Medical Imaging   3.0
RADT B11   Radiographic Pathology                  2.0
RADT B30   Principles of Venipuncture              1.0
RADT B13   Clinical Education 5                    6.5
Note: The clinical components of all radiologic technology courses are graded on a Pass/No Pass basis only. Radiologic Technology students are exempt from the maximum of three Pass/No Pass units which may be taken in a semester and from the maximum of 12 Pass/No Pass units which may be applied toward the AS degree at Bakersfield College.
Principles of Venipuncture
Job Skills Certificate

The purpose of this certificate is for successful completion of the Principles of Venipuncture course taught at Bakersfield College. The venipuncture regulations and requirements are part of the Health and Safety Code of California, Section 106985. The certificate is necessary for job readiness and to indicate competency for the performance of venipuncture at the job site. The State of California code requires a certificate to indicate proficiency. The certificate is part of the Career and Technical Education program which prepares students for employment in medical imaging and permits individuals to administer contrast media for x-ray examinations as part of their job as a radiologic technologist.

Prerequisite

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate competency by successfully performing venipuncture techniques on humans in the laboratory setting.

Career Opportunities:
The Venipuncture Job Skills Certificate permits Certified Radiologic Technologists (CRT’s) to perform venipuncture at their job site. Median salary is $32/hr for Kern and Tulare Counties.

Total Units: 1.0
Required Courses
Course #   Name                        Units
RADT B30   Principles of Venipuncture 1.0
(offerred spring semester only)

Principles of Fluoroscopy
Job Skills Certificate

This certificate provides fluoroscopy skills for students completing the Associate in Science Radiologic Technology program. The certificate is required as proof of completion to meet the regulations specified by the California Code of Regulations, Title 17: Public Health, Article 8: Additional School Requirements and Record Keeping, Section. 30437. The certificate is part of the Career and Technical Education program which prepares students for State licensure which is necessary for employment in the field of x-ray technology.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Principles of Fluoroscopy Job Skills Certificate. This certificate provides fluoroscopy skills for students completing the Associate in Science Radiologic Technology program.

Program Learning Outcomes
Upon successful completion, the student will:
• employ appropriate radiation protection practices for patients and themselves.
• competently perform radiographic positioning.

Career Opportunities:
The Fluoroscopy Job Skills Certificate permits Certified Radiologic Technologists (CRT’s) to perform fluoroscopy at their job site. Median salary is $32/hr for Kern and Tulare Counties.

Total Units: 24.5
Required Courses
Course #   Name                        Units
RADT B2A   Radiographic Anatomy and Positioning 1 3.0
RADT B2B   Radiographic Anatomy and Positioning 2 3.0
RADT B2C   Radiographic Anatomy and Positioning 3 3.0
RADT B3A   Radiographic Principles 1 3.0
RADT B3B   Radiographic Principles 2 3.0
RADT B4A   Introduction to Clinical Education 1.5
RADT B5    Radiation Physics 3.0
RADT B9A   Sectional Anatomy for Medical Imaging 3.0
RADT B12   Radiobiology and Radiation Protection 2.0
Sociology

Degree
Sociology, Associate in Arts for Transfer
## Sociology
### Associate in Arts Degree for Transfer

The Associate in Arts in Sociology for Transfer is intended for those transfer-directed students who plan to complete an AA in Sociology because it guarantees admission to the CSU system (but not to a particular campus or major). In order to earn the Associate in Arts in Sociology for Transfer, students must complete a minimum of 60 required semester units of CSU-transferable coursework which includes the CSU General Education or IGETC requirements with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the Associate in Arts in Sociology for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated high-unit major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. No additional graduation requirements are required to complete this degree.

Sociology is the study of groups, institutions, social relationships, and social problems in contemporary society. The sociology major prepares the student for careers in law, social work, human services, urban development, law enforcement agencies, public service, counseling, mental health, teaching, and community service. Students will be prepared for a baccalaureate degree in Sociology or a similar degree.

### To Achieve the Associate in Arts for Transfer

Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Sociology Associate in Arts for Transfer degree.

### To Transfer Coursework

A minimum of 19 semester units in the major with a grade of ‘C’ or better while maintaining a minimum grade point average of at least 2.0 in all California State University transferable coursework.

### Program Learning Outcomes

Upon successful completion, the student will:
- Demonstrate an understanding of the perspectives, theories, methods and core concepts of the sociology.
- Explain the complex interplay between individual, culture, and social structure contributing to the historical development of the discipline of sociology.
- Demonstrate the ability to utilize the sociological perspective to critically analyze and describe the diverse intersections of social categories, including race, ethnicity, class, gender, sexuality, age, religion, and nationality.

### Total Units: 19-21

#### Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI B1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B2</td>
<td>Problems of Modern Society</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC B6</td>
<td>Research Methods for the Behavioral and Social Sciences</td>
<td>4.0</td>
</tr>
<tr>
<td>PSYC B5*</td>
<td>Elementary Statistics for the Behavioral and Social Sciences or</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH B22</td>
<td>Elementary Probability and Statistics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**List A - Select 6 units from the following:**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI B28</td>
<td>Introduction to Gender</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B45</td>
<td>Minority Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>CRIM B1</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI B20</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**List B: Select 3-4 units not already used from either Required Core or List A**

### Category

<table>
<thead>
<tr>
<th>Category</th>
<th>CSU</th>
<th>IGETC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units in Major</td>
<td>19-21</td>
<td>19-21</td>
</tr>
<tr>
<td>Possible double counting of GE's</td>
<td>10-12</td>
<td>10-12</td>
</tr>
<tr>
<td>General Education</td>
<td>39</td>
<td>37</td>
</tr>
<tr>
<td>Electives (CSU Transferrable)</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>
Spanish

Degree
Spanish, Associate of Arts for Transfer
The Associate in Arts in Spanish for Transfer degree provides a linguistic study of the language and an in-depth look into the culture of the Spanish-speaking world. The objective of the program is to provide students with opportunities to obtain an AA degree in Spanish, transfer to a four-year college, and achieve their academic goals. Graduates of this program will be better prepared for employment in both academic and non-academic fields, such as schools, corporations, business entities, and not-for-profits.

Requirements for AA-T or AS-T degrees:
The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
- A minimum of 18 semester units in a major area of emphasis, as determined by the district.
- The attainment of a minimum grade point average of 2.0.
- The completion of all courses required for the major with a 'C' or better. A 'P' (Pass) grade is not acceptable for courses in the major.

Departmental placement evaluation determines the course level where individual students begin the core courses. Credit or placement equivalent to two years of college level Spanish is required. If a student places out of any course and is not awarded units for that course, the student will need additional coursework to reach at least 19 total units in the major.

Due to differences in unit values, it may be necessary to substitute two 3 unit courses for each 4 unit required core course not taken.*

Program Learning Outcomes
Upon successful completion, the student will:
- demonstrate the ability to speak using appropriate grammatical forms as well as vocabulary appropriate to the level of those students who are seeking an AA-T degree in Spanish. They will show this through dialogs, prepared presentations, impromptu conversations with other students and the professor.
- demonstrate the ability to understand spoken Spanish as evident in responses through prepared dialogs and presentations as well as impromptu conversations with other students and the professor. Students will also demonstrate understanding of spoken Spanish on graded exams and directed interview questions.
- demonstrate the ability to write using appropriate grammatical forms as well as vocabulary appropriate to the level of those students who are seeking an AA-T degree in Spanish. They will show this through informal writing and formal writing.
- exhibit reading comprehension of informal and formal written texts including informal letters or short essays as well as literature and news articles from various parts of the Spanish speaking world.

Total Units: 19-21

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN B1</td>
<td>Elementary Spanish I</td>
<td>4.0</td>
</tr>
<tr>
<td>SPAN B2</td>
<td>Elementary Spanish II</td>
<td>4.0</td>
</tr>
<tr>
<td>SPAN B3</td>
<td>Intermediate Spanish I</td>
<td>4.0</td>
</tr>
<tr>
<td>or SPAN B35</td>
<td>Spanish for Heritage Speakers I</td>
<td>4.0</td>
</tr>
<tr>
<td>SPAN B4</td>
<td>Intermediate Spanish II</td>
<td>4.0</td>
</tr>
<tr>
<td>or SPAN B36</td>
<td>Spanish for the Heritage Speakers II</td>
<td>4.0</td>
</tr>
</tbody>
</table>

*Substitution Courses - See program description above

List A - Select 3 units from the following:
- ENGL B24  | Latino/a Literature          | 3.0   |
- HIST B30A | Early Chicano History        | 3.0   |
- HIST B30B | History of Chicanos in the Southwest | 3.0 |
- HIST B33  | Latin American History       | 3.0   |
- SOCI B36  | Sociology of the Chicano     | 3.0   |
- SOCI B45  | Minority Relations           | 3.0   |

Category

<table>
<thead>
<tr>
<th>Units in Major</th>
<th>CSU GE Breadth</th>
<th>Possible double counting of GE's</th>
<th>Degree Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-21</td>
<td>37-39</td>
<td>6-18</td>
<td>60</td>
</tr>
</tbody>
</table>
Theatre Arts

Degree
Theatre Arts, Associate of Arts for Transfer
Theatre Arts

Associate of Arts Degree for Transfer

The Associate in Arts in Theatre Arts for Transfer Degree (AA-T in Theatre Arts) is designed to provide students a clear transfer pathway to CSU campuses that offer bachelor’s degrees in Theatre Arts. Ed Code Section 66746-66749 states that students earning the Associate in Arts in Theatre Arts for Transfer Degree (AA-T in Theatre Arts) will be granted priority for admission as a Theatre major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of ‘C’ or better in all major coursework. This degree provides students with an understanding and an appreciation for the art of theatre and includes courses in acting, technical theatre, rehearsal and performance as well as an introduction to the theatre and play analysis. Completion of this curriculum will provide preparation for future theatre studies.

Requirements for the Associate of Arts Degree for Transfer:
• The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University – Breadth Requirements.
• A minimum of 18 semester units in a major area of emphasis, as determined by the district.
• The obtainment of a minimum grade point average of 2.0.
• The completion of all courses required for the major with a ‘C’ or better. A ‘P’ (Pass) grade is not acceptable for courses in the major.

Total Units: 18

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA B20</td>
<td>Introduction to Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA B1</td>
<td>Introduction to Acting</td>
<td>3.0</td>
</tr>
<tr>
<td>and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA B27</td>
<td>Acting Theatre Laboratory</td>
<td>2.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA B28</td>
<td>Technical Theatre Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

List A - Select 9 units from the following:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>THEA B2A</td>
<td>Elements of Acting</td>
<td>3.0</td>
</tr>
<tr>
<td>and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA B2B</td>
<td>Elements of Acting</td>
<td>3.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA B14</td>
<td>Introduction to Stage Costume</td>
<td>3.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA B16</td>
<td>Stagecraft</td>
<td>3.0</td>
</tr>
</tbody>
</table>

If not used in required core:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA B27</td>
<td>Acting Theatre Laboratory</td>
<td>2.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA B28</td>
<td>Technical Theatre Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Recommended sequence:

FALL SEMESTER, YEAR 1
Theatre B1 & Theatre B20 (6 units)

SPRING SEMESTER, YEAR 1
Theatre B2a & Theatre B27 or B28 (4-5 units)

FALL SEMESTER, YEAR 2
Theatre B14 or B2b & Theatre B27 or B28 (4-5 units)

SPRING SEMESTER, YEAR 2
Theatre B16 or B2b & Theatre B27 or B28 (4-5 units)

Category

Units in Major: 18
CSU GE Breadth: 37-39
Possible double counting of GE’s: 3-6
Degree Total: 60

Program Learning Outcomes

Upon successful completion, the student will:
• demonstrate the ability to recognize, describe, and/or effectively produce various components of a performing art form.
• demonstrate an understanding and appreciation of the ways in which arts reflect historical, intellectual, and cultural contexts, as well as aesthetic tastes.
• demonstrate through successful group or individual performance acquired skills and knowledge appropriate to a particular performing art form.
Welding

**Degree**
Industrial Technology, Welding Option, Associate of Science

**Certificates**
- Welding, Certificate of Achievement
- Blueprint Reading and Layout for Welders, Job Skills Certificate
- Gas Metal Arc/Gas Tungsten Arc Welding/Flux Core Arc Welding, Job Skills Certificate
- Shielded Metal Arc Welding, Job Skills Certificate
- Welding Certification, Job Skills Certificate
Industrial Technology, Welding Option
Associate of Science Degree

Students must comply with the requirements as shown in the catalog under graduation requirements. Students should seek the advice of a welding instructor, counselor or advisor for assistance in planning for a associate degree. Career opportunities include jobs requiring skills in welding and layout.

To Achieve the Associate in Science
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Industrial Technology, Welding Option Associate in Science degree.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for employment in the welding industry.
• demonstrate problem solving skills used in product design and development in the welding industry.

Total Units: 39-40

Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B1A</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1B</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B53AB</td>
<td>Shielded Metal Arc Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B55A</td>
<td>Structural Plate Certification I</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B55B</td>
<td>Structural Plate Certification II</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B55CD</td>
<td>ASME Pipe Certification</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B74A</td>
<td>Introduction to GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding)</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B74B</td>
<td>Introduction to Gas Tungsten Arc Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B54A</td>
<td>Blueprint Reading for Welders &amp; Machinists</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B54B</td>
<td>Template Development and Layout for the Welder</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B65AB</td>
<td>Welded Steel Structures</td>
<td>3.0</td>
</tr>
<tr>
<td>MFGT B1AB</td>
<td>Machine Tool Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDT B271</td>
<td>Special Problems in Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness or equivalent</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Welding Certificate of Achievement

Students must comply with the requirements as shown in the catalog under certificate requirements. Students should seek the advice of a welding instructor, counselor or advisor for assistance in planning for a welding Certificate of Achievement. Career opportunities include jobs requiring the ability to weld in multiple processes, to interpret and create blueprints, to perform layout operations, and to perform basic machining tasks.

To Achieve the Certificate of Achievement
Upon completion of the following courses with at least a ‘C’ grade in each course, the student will be awarded a Welding Certificate of Achievement.

Program Learning Outcomes
Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university degree program or for certification in the department programs.

Career Opportunities:
Welder, Structural Fabricator
Blueprint Reading and Layout for Welders, Job Skills Certificate

This certificate covers the principles of blueprint reading as it applies to welders. Emphasis is placed on the ability to visualize and interpret working drawings. Welding symbols and basic shop math are included. Layout techniques including mathematical and pipe fitting technology are covered. Career opportunities include blueprint reading and layout in the welding industry.

Program Learning Outcomes

Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university degree program or for certification in the department programs.

Career Opportunities:
Welder, Structural Fabricator

Total Units: 6

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WELD B54A Blueprint Reading for Welders and Machinists</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B54B Template Development and Layout for the Welder</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Gas Metal Arc/Gas Tungsten Arc/Flux Core Arc Welding, Job Skills Certificate

This certificate emphasizes welding processes of gas metal arc welding (GMAW), gas tungsten arc welding (GTAW) and flux core arc welding (FCAW). Theory and application as well as safety of these applications while welding on mild steel, aluminum and stainless steel are emphasized.

Program Learning Outcomes

Upon successful completion, the student will:
• demonstrate proficiency in technical skills and safety principles required for industrial employment.
• demonstrate problem solving skills used in industrial design and product development.
• demonstrate a deep understanding of the core material required for transfer to a four year university degree program or certification in the department programs.

Career Opportunities:
Welder, Structural Fabricator

Total Units: 8

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B1A Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1B Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B74A Introduction to GMAW &amp; FCAW</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B74B Introduction to Gas Tungsten Arc Welding</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Shielded Metal Arc Welding
Job Skills Certificate

This certificate emphasizes welding processes from oxy-acetylene cutting and brazing through shielded metal arc welding using many different welding electrodes and all positions. Blueprint reading and pattern layouts for welding are highlighted. Career opportunities include entry level welding jobs requiring the use of the SMAW process, blueprint reading, and layout.

Program Learning Outcomes
Upon successful completion, the student will:

- demonstrate proficiency in technical skills and safety principles required for industrial employment.
- demonstrate problem solving skills used in industrial design and product development.
- demonstrate a deep understanding of the core material required for transfer to a four year university degree program or for certification in the department programs.

Total Units: 12

 Required Courses
<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B1A</td>
<td>Introduction to Oxygen Acetylene Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B1B</td>
<td>Introduction to the Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B53AB</td>
<td>Shielded Metal Arc Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>WELD B54A</td>
<td>Blueprint Reading for Welders and Machinists</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B54B</td>
<td>Template Development and Layout for the Welder</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Welding Certification
Job Skills Certificate

This certificate emphasizes welding processes of SMAW, GMAW, FCAW, Oxy/Acetylene cutting, and Blueprint Reading. Theory and application as well as safety of these processes while welding on mild steel are emphasized. This program prepares students for careers in Welding Entry Level Welding Job.

To Achieve the Job Skills Certificate
Upon completion of the following courses with at least a ‘B’ grade in each course, the students will be awarded a Welding Certification Job Skills Certificate.

Program Learning Outcomes
Upon successful completion, the student will:

- demonstrate proficiency in technical skills and safety principles required for employment in the welding industry.
- Students will demonstrate problem solving skills used in product design and development in the welding industry.
- Students will demonstrate an understanding of the core material required for A.W.S. certification in the welding program.

Total Units: 13

 Required Courses
<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD B81</td>
<td>Introduction to Welding and Cutting</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B54A</td>
<td>Blueprint Reading for Welders and Machinists</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD B53A</td>
<td>Shielded Metal Arc Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B74A</td>
<td>Introduction to GMAW &amp; FCAW</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B55A</td>
<td>Structural Plate Certification I</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD B55B</td>
<td>Structural Plate Certification II</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Woodworking and Cabinetmaking

**Degree**
Industrial Technology, Woodworking & Cabinetmaking Option, Associate of Science

**Certificates**
Cabinetmaking, Certificate of Achievement

Woodworking & Cabinetmaking, Job Skills Certificate
## Industrial Technology, Woodworking & Cabinetmaking Option
### Associate of Science Degree

This degree covers the principles of woodworking to include materials, hand tools, wood cutting machinery and wood finishing. Emphasis will be put on designs to include modular construction, new materials and processes. Advanced bidding techniques are discussed.

### Program Learning Outcomes
The successful student will be able to:
- demonstrate proficiency in technical skills and safety principles required for employment in the woodworking/cabinetmaking industry.
- demonstrate problem solving skills used in product design and development in the woodworking industry.
- demonstrate a deep understanding of the core material required for certification in the woodworking program.

### Career Opportunities:
Cabinetmaker, Carpenter.

### Total Units: 33

#### Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD B1</td>
<td>Introduction to Woodworking Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B5</td>
<td>Intermediate Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B65A</td>
<td>Advanced Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B65B</td>
<td>Advanced Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B50</td>
<td>Modern College Arithmetic &amp; Pre-Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
</tr>
<tr>
<td>INDT B10</td>
<td>Occupational Readiness</td>
<td>3.0</td>
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</tbody>
</table>

Electives to equal 33 units

<table>
<thead>
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<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDT B274</td>
<td>Special Problems in Woodworking</td>
<td>2.0-3.0</td>
</tr>
<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B50</td>
<td>Introduction to College Composition</td>
<td>4.0</td>
</tr>
</tbody>
</table>

## Cabinetmaking
### Certificate of Achievement

This certificate covers the principles of woodworking to include materials, hand tools, wood cutting machinery and wood finishing. Emphasis will be put on designs to include modular construction, new materials and processes. Advanced bidding techniques are discussed.

### Program Learning Outcomes
The successful student will be able to:
- demonstrate proficiency in technical skills and safety principles required for industrial employment.
- demonstrate problem solving skills used in industrial design and product development.
- demonstrate a deep understanding of the core material required for transfer to a four year university degree program and/or certification in the department programs.

### Career Opportunities:
Cabinetmaker, Carpenter.

### Total Units: 33

#### Required Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD B1</td>
<td>Introduction to Woodworking Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST B1</td>
<td>Introduction to Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B5</td>
<td>Intermediate Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B65A</td>
<td>Advanced Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B65B</td>
<td>Advanced Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH B50</td>
<td>Modern College Arithmetic &amp; Pre-Algebra</td>
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<tr>
<td>INDR B12</td>
<td>Introduction to Drafting and CAD</td>
<td>2.0</td>
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<tr>
<td>INDT B10</td>
<td>Occupational Readiness</td>
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Electives to equal 33 units

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<tr>
<td>INDT B274</td>
<td>Special Problems in Woodworking</td>
<td>2.0-3.0</td>
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<tr>
<td>INDR B20A</td>
<td>Computer Aided Drafting and Design (CAD)</td>
<td>3.0</td>
</tr>
<tr>
<td>FORE B2</td>
<td>Natural Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL B50</td>
<td>Introduction to College Composition</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Woodworking & Cabinetmaking
Job Skills Certificate

This certificate covers the principles of woodworking to include materials, hand tools, wood cutting machinery and wood finishing. Emphasis will be put on designs to include modular construction, new materials and processes. Advanced bidding techniques are discussed.

Program Learning Outcomes
The successful student will be able to:

• demonstrate proficiency in technical skills and safety principles required for employment in the woodworking/cabinetmaking industry.
• demonstrate problem solving skills used in product design and development in the woodworking industry.
• demonstrate a deep understanding of the core material required for certification in the woodworking program

Career Opportunities:
Cabinetmaker, Carpenter.

Total Units: 9
Select 6 units from the following

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD B1</td>
<td>Introduction to Woodworking Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B2</td>
<td>Furniture and Cabinetmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>WOOD B5</td>
<td>Intermediate Cabinetmaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Additional Preparatory Pathways Information

Primary Care Associate/Physician’s Assistant

Prerequisites and Course Requirements
Stanford University Medical Center administers a program to train individuals who function in association with physicians in the maintenance and delivery of primary health care to medically underserved communities.

Upon completion of the prerequisite pre-clinical program at Bakersfield College or other accredited institutions, students admitted to the program have a 21-month curriculum (seven quarters) which integrates classroom learning and clinical practice, coordinated through Stanford University Medical Center. Over the course of 7 quarters students participate in approximately 34 weeks of didactic and skills training, and 46 weeks of preceptorship experience. A large portion of the didactic training takes place in quarters 1-3, with most of the clinical preceptorship experience occurring during quarters 4-7. All lectures and skills training take place at Stanford/Foothill campus. For their clinical preceptorship experience students are placed with a physician in their home community. Students return to Stanford each quarter for integrated instruction and testing. For complete program information visit http://pcap.stanford.edu/.

For application and program information contact Carlos Flores PA-C, Kern County Regional Coordinator via email cdadflores@aol.com for Bakersfield College pre-requisite course information contact BC Advisor Dinorah Castro via email dicastro@bakersfieldcollege.edu.

Program Academic Prerequisites
A minimum grade of ‘C’ must be attained in each of these courses. Only work from a regionally accredited college can be accepted.

- Intermediate Algebra – MATH BD/B70 at Bakersfield College
- Introductory or General Chemistry – CHEM B11, B1A, or B18 at Bakersfield College
- Cultural Anthropology or Introduction to Sociology – ANTH B2 or SOC B1 at Bakersfield College
- English/Expository Composition – ENGL B1A at Bakersfield College
- General Psychology – PSYC B1A at Bakersfield College
- General Microbiology (with lab) – BIOL B16 at Bakersfield College
- Human Anatomy and Physiology I (with lab) – BIOL B32 at Bakersfield College
- Human Anatomy and Physiology II (with lab) – BIOL B33 at Bakersfield College

Clinical Prerequisites
Minimum requirements for application and admission include:
- United States citizen or permanent visa.
- High School Diploma or equivalent.
- A minimum of 3,000 hours of direct patient care experience (this requirement can be met with 18 months of full-time work experience or equivalent part-time hours).
- Satisfactory completion of the following academic prerequisites or their equivalents.

General Education courses are required for the Primary Care Associate program. It is recommended that an associate degree at Bakersfield College (AS in Biology - Human Biology Emphasis) be completed prior to applying to the program.

Clinical Preceptorship Experience
The PCA Program takes responsibility for approving and placing students in clinical settings. The goal is for students to train at primary care sites in their community. The student may be required to relocate or travel if an appropriate preceptor site cannot be located in their immediate area. These primary care practices include a mix of family medicine, internal medicine, pediatrics and women’s health sufficient to provide a broad base of experience in health care of all genders, ages, and across the life span. Continuity of care is emphasized. In keeping with our mission students are required to have a portion of their primary care training occur at an officially-determined underserved site.

Pre-Veterinary Medicine Option
Students are referred to UC Davis School of Veterinary Medicine (www.vetmed.ucdavis.edu/students) and Western University School of Health Sciences, College of Veterinary Medicine (prospective.westernu.edu/veterinary/welcome-17) for the most current program information.
Pre-Med

Bakersfield College has a very active Pre-Med club to help students get lower division coursework and experience in preparation for transfer with a goal of Medicine. Please visit the Pre-med club website at http://bcpremed.weebly.com/

The club was re-instated in the fall of 2001 in an attempt to help students interested in all health professions achieve their goals through:
- attending pre-med conferences
- internship opportunities
- research opportunities
- informative seminars
- volunteer work.

Contact the Pre-Med faculty adviser for more information:
Faculty Adviser - Joe Saldivar, Ph. D.

California Medical Schools

This is a list of Medical Schools in California. If you are considering Med-School, you should consider checking out these sights so that you may develop a course plan with the school(s) of your choice. These sights are for all medical professions. These sights can also be helpful even if medical school is not your primary health field.

Keck School of Medicine of the University of Southern California
http://www.usc.edu/school/medicine/

Loma Linda University School of Medicine
http://www.llu.edu/llu/medicine/

Stanford University School of Medicine
http://med-www.Stanford.edu/

University of California, Davis, School of Medicine
http://www-med.ucdavis.edu/

University of California, Irvine, College of Medicine
Http://www.ucihs.uci.edu/com/

University of California, Los Angeles, UCLA School of Medicine
Http://www.medsch.ucla.edu/

University of California, San Diego, School of Medicine
Http://www.medicine.ucsd.edu/

University of California, San Francisco, School of Medicine
Http://www.som.ucsf.edu/som/

Pre-Law Program

Pathway to Law School Program
In partnership with The State Bar of California, the Pathway to Law School initiative at Bakersfield College enhances opportunities and advancement in the legal profession for diverse populations, particularly those who have been underrepresented in the practice of law.

Why Study Law?
Studying law explores many aspects of human life and allows you to develop a range of skills. Legal training fosters a broad and deep understanding of the law as well as develops abstract and critical thinking, practical problem solving skills and strong communication skills. The legal profession offers professional growth, opportunities, intellectual challenge, social activism empowerment, financial rewards, prestige and personal fulfillment in diverse areas such as: criminal law, corporate law, real estate law, tax law, family law, education law, patent law, product liability law and many other areas.

Career Possibilities
Career paths and opportunities for lawyers are endless. A law degree can be used in traditional legal employment, non-traditional legal employment and non-legal employment. Below are just some of the careers paths that you can take with a law degree.

- Lawyer
- Judge
- Mediator
- Paralegal
- Secretary
- Consultant
- Educator
- Corporate attorney
- Court Administrator
- Governmental administrator
- Politician

Participating Schools: Colleges/Law Schools
- University of San Francisco School of Law
- Santa Clara University School of Law
- University of California at Davis School of Law
- University of Southern California Gould School of Law
- Loyola Law School
- University of California at Irvine School of Law

Please refer to the “Pre Law Pathway” on page 235.
Pre-Law Pathway

Pre-law Pathway covers major and IGETC general education courses for college-ready students earning a AA-T Political Science degree in 2 years and transferring to a UC.

<table>
<thead>
<tr>
<th>First (Fall) Semester</th>
<th>IGETC/AA-T</th>
<th>Units</th>
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<tbody>
<tr>
<td>POLS B1</td>
<td>AA-T</td>
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<tr>
<td>MATH B22 or PSYC B5</td>
<td>Area 2</td>
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<tr>
<td>ENGL B1a</td>
<td>Area 1</td>
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</tr>
<tr>
<td>COMM B4 or COMM B5</td>
<td>Req’d</td>
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<td>(recommended STDV B1)</td>
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<th>IGETC/AA-T</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL B2 or PHIL B9</td>
<td>Area 1</td>
<td>3-4</td>
</tr>
<tr>
<td>ADMJ B40</td>
<td>Area 4</td>
<td>3</td>
</tr>
<tr>
<td>IGETC (Social &amp; Behavior Science) Recommended: HIST 17A or HIST 17B</td>
<td>Area 4</td>
<td>3</td>
</tr>
<tr>
<td>IGETC (Arts)</td>
<td>Area 3</td>
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<tr>
<td>IGETC (Humanities)</td>
<td>Area 3</td>
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<td>Total</td>
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<th>Summer Semester</th>
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<tr>
<td>SPECIAL STUDIES B49 (recommended not required)</td>
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</table>

<table>
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<th>Units</th>
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<tbody>
<tr>
<td>POLS B2</td>
<td>AA-T</td>
<td>3</td>
</tr>
<tr>
<td>IGETC (Arts or Humanities)</td>
<td>Area 3</td>
<td>3</td>
</tr>
<tr>
<td>IGETC (Physical Science/lab)</td>
<td>Area 5</td>
<td>4-5</td>
</tr>
<tr>
<td>AA-T Political Science Elective (POLB12 recommended)</td>
<td>AA-T</td>
<td>3</td>
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<tr>
<td>Elective (UC, CSU transferable)</td>
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<tr>
<td>Total</td>
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<td>16+</td>
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<table>
<thead>
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<th>Fourth (Spring) Semester</th>
<th>IGETC/AA-T</th>
<th>Units</th>
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<tr>
<td>IGETC (Social &amp;Behavior Science)</td>
<td>Area 4</td>
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<tr>
<td>IGETC (Biological Science)</td>
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<tr>
<td>AA-T Political Science Elective (POLB16 recommended)</td>
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<tr>
<td>Elective (UC, CSU transferable)</td>
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<tr>
<td>Total</td>
<td></td>
<td>16+</td>
</tr>
</tbody>
</table>

Faculty Lead for Pathway: Edward Borgens
Student Affairs Lead for Pathway: Pearl Urena

*At least 19-20 units of Political Science courses are required
*The IGETC (general education) requires one lab in either the physical science or life science.
Courses

ACDV - Academic Development Courses

ACDV B5 Tutor Training and Practicum Level 1
1 unit
Prerequisite: Minimum grade of ‘B’ in subject to be tutored and approval of subject area instructor and evaluation of prerequisites by the Tutor Trainer and/or Tutor Coordinator. Recommended: BC placement into reading level 06. Description: Essential human relations skills and methods of effective tutoring, placing these skills into practice with tutees assigned by the Tutor Coordinator. This course is required for Level 1 International Tutor Training Program Certification (ITTPC). Tutors are referred by subject area instructor(s). Note: Must have the ACDV B5 instructor’s signature to enroll in any ACDV B5 class. Hours: 18 lecture Transferable: CSU and private colleges.

ACDV B5A Tutor Training and Practicum Level 2
.5 unit
Prerequisites: Minimum grade of ‘B’ in subject to be tutored or approval of subject area instructor or evaluation of prerequisites by the Tutor Trainer and/or Tutor Coordinator. Recommended: BC Placement into reading level 06. Description: Designed for returning tutors to build tutoring skills. Skills include essential human relations skills and methods of effective tutoring, placing skills into practice with tutees referred by the Tutor Coordinator. This course is required for Level 2 International Tutor Training Program Certification (ITTPC). Students may be referred by subject area instructor(s). Hours: 9 lecture Transferable: CSU and private colleges.

ACDV B50 Advanced Reading and Critical Thinking
3 units
Prerequisite: BC placement into reading level 05 or successful completion of ACDV B62 or equivalent with a grade of C or better. Recommended: BC placement into writing level 05 or successful completion of ENSL B51/EMLS. Description: Recommended for students who have not met the reading competency graduation requirement at entrance or for those who wish to improve their skills in academic reading. Emphasizes critical reading and thinking and reading flexibility with college-level material. Focuses on application, analysis, synthesis, and evaluation in both oral and written form. Successful completion of ACDV B50 meets graduation requirement for reading competency. Hours: 54 lecture Transferable: Not transferable. Not degree applicable.

ACDV B55 First Year Student Success
0.5-2 units
Description: Introduces students to the college’s academic, social, and physical environments and promotes personal and academic locus of control necessary for student success in college. Designed to increase students’ probability for college success as students locate, navigate, and utilize the campus’ academic and student services resources. The course covers note-taking, test-taking, textbook reading, effective communication, time-management, and library research and other skills necessary for college success. Hours: 9 lecture for each .5 unit (9-36) Transferable: Not transferable. Not degree applicable.

ACDV B61 Accelerated Reading
4 units
Prerequisite: BC placement into reading level 04 or successful completion of ACDV B80 or equivalent with a grade of C or better. Recommended: ACDV B201A, ACDV B201B, and BC placement into writing level 03. Description: This course is recommended for students who place at Reading Level 3 or 4 who need to improve academic vocabulary, reading comprehension, critical thinking, research skills, and reading flexibility with college level material. Students who successfully pass this course will have fulfilled the reading competency requirement for graduation. Note: Not open to students with credit in ACDV B62 or ENSL B51 or EMLS B61 Hours: 72 lecture Transferable: Not transferable. Not degree applicable.

ACDV B70A Time Management Strategies for Academic Success
0.5 unit
Prerequisite: BC placement into reading level 03 or equivalent with a grade of C or better. Recommended: ACDV B201A, ACDV B201B, and BC placement into writing level 03. Description: This course is offered for Level 1 International Tutor Training Program Certification (ITTPC). Tutors are referred by subject area instructor(s). Approval of subject area instructor or evaluation of prerequisites by the Tutor Trainer and/or Tutor Coordinator. Restriction: Must have the ACDV B5 instructor’s signature to enroll in any ACDV B5 class. Hours: 9 lecture Transferable: Not transferable. Not degree applicable.

ACDV B70B Note Taking Strategies for Academic Success
0.5 unit
Prerequisite: BC placement into reading level 03 or equivalent with a grade of C or better. Recommended: ACDV B201A, ACDV B201B, and BC placement into writing level 03. Description: This course is offered for Level 1 International Tutor Training Program Certification (ITTPC). Tutors are referred by subject area instructor(s). Approval of subject area instructor or evaluation of prerequisites by the Tutor Trainer and/or Tutor Coordinator. Restriction: Must have the ACDV B5 instructor’s signature to enroll in any ACDV B5 class. Hours: 9 lecture Transferable: Not transferable. Not degree applicable.

ACDV B70C Textbook Reading Strategies for Academic Success
0.5 unit
Prerequisite: BC placement into reading level 03 or equivalent with a grade of C or better. Recommended: ACDV B201A, ACDV B201B, and BC placement into writing level 03. Description: This course is offered for Level 1 International Tutor Training Program Certification (ITTPC). Tutors are referred by subject area instructor(s). Approval of subject area instructor or evaluation of prerequisites by the Tutor Trainer and/or Tutor Coordinator. Restriction: Must have the ACDV B5 instructor’s signature to enroll in any ACDV B5 class. Hours: 9 lecture Transferable: Not transferable. Not degree applicable.
textbook reading strategies.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

**ACDV B70D Test Taking Strategies for Academic Success**
0.5 unit
Description: This course includes hands-on learning for developing effective test taking strategies related to academic success in college. Students work on test taking strategies both independently and interactively in groups on guided, hands-on activities related to developing test taking skills. There are additional outside of class computer lab hours required for students to practice working on a variety of test taking strategies.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

**ACDV B70E Memory Strategies for Academic Success**
0.5 unit
Description: This course includes hands-on learning for developing effective memory strategies related to academic success in college. Students work on memory techniques both independently and interactively in groups on guided, hands-on activities related to developing memory skills. There are additional outside of class computer lab hours required for students to practice working on a variety of memory strategies.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

**ACDV B70F Vocabulary Improvement Strategies for Academic Success**
0.5 unit
Description: This course includes hands-on learning for developing effective vocabulary improvement strategies related to academic success in college. Students work on vocabulary improvement both independently and interactively in groups on guided, hands-on activities related to developing vocabulary improvement skills. There are additional outside of class computer lab hours required for students to practice working on a variety of vocabulary improvement strategies.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

**ACDV B72 Basic Arithmetic & Pre-Algebra**
4 units
Prerequisite: BC placement into math level 01 or successful completion of ACDV B201C with a grade of PASS.
Recommended: BC placement into reading level 05.
Description: This course offers an accelerated, intensive option for preparation for Elementary Algebra. The material covered is equivalent to that covered separately in ACDV B77 (Basic Arithmetic) and Math B50 (Pre-algebra). Reviews basic arithmetic including addition, subtraction, multiplication, and division of whole numbers, integers, decimals, fractions, and also includes percent, measurement, and reading tables. Includes real life applications emphasizing estimation and word problems. To prepare for algebra, factoring, exponents, solving simple equations, introduction to plane geometry, averages, ratios, rates, and proportions are included.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

**ACDV B80 Foundations of College Composition and Reading**
4 units
Prerequisite: BC placement into reading level 03 or writing level 03 or successful completion of ACDV B201A or ACDV B201B or equivalent with a grade of PASS.
Description: This course is designed to prepare students for success in English and reading courses 2 levels prior to transfer. Students will learn basic multi-paragraph writing skills in response to thematic, mostly non-fiction reading passages. The course curriculum emphasizes critical reading skills, writing and revision processes, and basic MLA formatting and English writing conventions. Due to the integrated curriculum, students can progress in both English and reading levels in one semester.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

**ACDV B195 Basic Computer Literacy**
1-3 units
Recommended: BC placement into reading level 05.
Description: The student will learn how to identify the parts and functions of personal computers. Students will be introduced to such varied topics as use of an internet browser, how to establish and maintain an email account, how to navigate such programs as basic word processing and function keys, how to use established databases and search engines to find information on the internet, and how to copy, save, print, and send documents from various sources.
Hours: 18-54 lecture
Transferable: Not transferable. Not degree applicable.

**ACDV B201A Reading for Academic Success**
0.5-1 unit
Description: This course offers individually prescribed lessons in reading fluency and comprehension, vocabulary development, study skills, critical thinking, and writing with supervised practice in the computer lab on assigned tasks. Open entry/open exit.
Students should report to SS 143 as soon as possible to take orientation and complete enrollment paperwork.
Hours: 27 lab hours for each .5 unit (27-54)
Transferable: Not transferable. Not degree applicable.

**ACDV B201B Writing for Academic Success**
0.5-1 unit
Description: The course offers supervised, self-paced computer lab activities with individually prescribed lessons in English language development and writing skills. Open entry/open exit lab courses. Students should report to SS 143 as soon as possible to take orientation and complete enrollment forms. ACDV B281b is recommended as a supplement to all English and Academic Development classes.
Note: ACDV B201B is recommended as a supplement to all English and Academic Development classes.
Hours: 27 lab hours for each .5 unit (27-54)
Transferable: Not transferable. Not degree applicable.

**ACDV B201C Basic Math Skills for Academic Skills**
0.5-1 unit
Description: The student will learn how to identify the parts and functions of personal computers. Students will be introduced to such varied topics as use of an internet browser, how to establish and maintain an email account, how to navigate such programs as basic word processing and function keys, how to use established databases and search engines to find information on the internet, and how to copy, save, print, and send documents from various sources.
Hours: 18-54 lecture
Transferable: Not transferable. Not degree applicable.

**ACDV B201D Basic Math Skills for Academic Skills**
0.5-1 unit
Description: The course offers individually prescribed lessons in reading fluency and comprehension, vocabulary development, study skills, critical thinking, and writing with supervised practice in the computer lab on assigned tasks. Open entry/open exit.
Students should report to SS 143 as soon as possible to take orientation and complete enrollment paperwork.
Hours: 27 lab hours for each .5 unit (27-54)
Transferable: Not transferable. Not degree applicable.

**ACDV B201E Basic Math Skills for Academic Skills**
0.5-1 unit
Description: The course offers individually prescribed lessons in reading fluency and comprehension, vocabulary development, study skills, critical thinking, and writing with supervised practice in the computer lab on assigned tasks. Open entry/open exit.
Students should report to SS 143 as soon as possible to take orientation and complete enrollment paperwork.
Hours: 27 lab hours for each .5 unit (27-54)
Transferable: Not transferable. Not degree applicable.

**ACDV B201F Basic Math Skills for Academic Skills**
0.5-1 unit
Description: The course offers individually prescribed lessons in reading fluency and comprehension, vocabulary development, study skills, critical thinking, and writing with supervised practice in the computer lab on assigned tasks. Open entry/open exit.
Students should report to SS 143 as soon as possible to take orientation and complete enrollment paperwork.
Hours: 27 lab hours for each .5 unit (27-54)
Transferable: Not transferable. Not degree applicable.
ACDV B280 Supervised Tutoring
0 unit
Description: Provides tutoring in various academic subjects in a designated learning center to augment classroom instruction. Referral by subject-area instructor, counselor, or tutor trainer is suggested.
Note: Weekly hours are decided jointly by the instructor and student. Open entry/open exit.
Hours: 1-99 lab
Repeat unlimited
Transferable: Not transferable. Not degree applicable.

ACDV B281A Supervised Tutoring-Computer: Reading
0 unit
Description: This course offers individually prescribed lessons in reading fluency and comprehension, vocabulary development, study skills, critical thinking, and writing with supervised practice in the computer lab on assigned tasks problems. Open entry/open exit. Students should report to SS 143 as soon as possible to take orientation and complete enrollment paperwork.
Note: Weekly hours are decided jointly by the instructor and students. Students cannot register by the web for this section; see instructor in SS 143 to complete enrollment.
Hours: 1-99 lab
Repeat: Unlimited
Transferable: Not transferable. Not degree applicable.

ACDV B281B Supervised Tutoring-Computer: Writing
0 unit
Description: This course offers supervised, self-paced computer lab activities with prescribed lessons in English language development and writing skills. Open entry/open exit lab courses. Students should report to SS 143 as soon as possible to take orientation and complete enrollment forms. ACDV B281b is recommended as a supplement to all English and Academic Development classes.
Note: Weekly hours are decided jointly by the instructor and student. Students cannot register by the web for this course; see instructor in SS 143 to complete enrollment.
Hours: 1-99 lab
Repeat: Unlimited
Transferable: Not transferable. Not degree applicable.

ACDV B281C Supervised Tutoring-Computer: Mathematics
0 unit
Description: This course offers supervised, self-paced computer lab activities with prescribed lessons to develop basic math skills. Open entry/open exit lab courses. Students should report to SS 143 as soon as possible to take orientation and complete enrollment forms. ACDV B281c is recommended as a supplement to all basic skills math courses.
Note: Weekly hours are decided jointly by the instructor and student. Students cannot register by the web for this course; see instructor in SS 143 to complete enrollment.
Hours: 1-99 lab
Repeat: Unlimited
Transferable: Not transferable. Not degree applicable.

ACDV B280 Supervised Tutoring
0 unit
Description: Provides tutoring in various academic subjects in a designated learning center to augment classroom instruction. Referral by subject-area instructor, counselor, or tutor trainer is suggested.
Note: Weekly hours are decided jointly by the instructor and student. Open entry/open exit.
Hours: 1-99 lab
Repeat unlimited
Transferable: Not transferable. Not degree applicable.

ADMJ B40 Law and Democracy
3 units
Recommended: BC placement into reading level 06.
Description: An overview of practical aspects of civil, criminal, and constitutional law; development of skills in critical reading, writing, problem solving, and oral communication with an emphasis on preparation for success in legal education; preparation for civic engagement and community-based learning.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.8; CSU GE D.10

ADMJ B60 Arrest and Control Techniques. PC 832
2.5 unit
Description: Introduces methods and regulations used by peace officers regarding the powers of arrest, and laws of search and seizure. Students will engage in weaponless self defense and physical arrest activities. Course is designed to meet the requirements of California Penal Code section 832 (PC 832), which establishes a minimum mandatory standard of training for peace officers in the State of California. Meets the Commission on Peace Officers Standards and Training (P.O.S.T.) requirements.
Hours: 45 lecture
Transferable: Not transferable. Not degree applicable.

ADMJ B61 Firearms Training P.C. 832
1.5 unit
Prerequisites: ADMJ B60 with a grade of ‘C’ or better.
Limitation on Enrollment: Per penal code section 13511.5, Students must obtain written clearance from the California Department of Justice (DOJ) verifying that they are NOT prohibited from possessing firearms. LiveSCAN and a DOJ clearance is required prior to registration for this course.
LiveSCAN application is provided by WESTEC. Approval of equivalent enrollment eligibility is not a guarantee that state regulatory and licensing authorities will also grant equivalency for licensure or employment purposes. Fingerprinting is required by law to take this course and legally apply for a permit.
Description: Provides students with the competencies required for certification by Peace Officer Standards and Training (P.O.S.T.) 80101. Students will engage in the use of firearms, which will include handgun familiarization; safety; care, cleaning and storage; firearms range qualifications.
SPECIAL NOTICE: Per Penal Code section 13511.5, students must obtain written clearance from the California Department of Justice verifying that they are not prohibited from possessing firearms which involves completion of LiveSCAN and DOJ clearance.
Hours: 27 lecture
Transferable: Not transferable. Not degree applicable.

ADMJ B63 Power to Arrest (Security Guard Course)
0.5 unit
Description: Provide students with the knowledge and skills to pass the State of California mandated exam for a Security Guard Card and to function at the entry level of the security profession. Class meets the certification requirements for the Bureau of
Security and Investigative Services from the California State and Consumer Services Agency.  
Hours: 9 lecture  
Transferable: Not transferable. Not degree applicable.

**AGBS B3 Introduction to Agriculture Business**  
3 units  
Description: Provides a basic understanding of the business and economics of the agricultural industry; an introduction to the economic aspects of agriculture and their implications to the agricultural producer, consumer and the food system; management principles encountered in the day to day operation of an agricultural enterprise as they relate to the decision making process.  
C-ID: AG + AB 104  
Hours: 54 lecture  
Transferable: CSU and private colleges.

**ADMJ B72 Peace Officer’s Basic Academy**  
21 units  
Prerequisite: Limitation on Enrollment: Per penal code section 13511.5, Students must obtain written clearance from the California Department of Justice (DOJ) verifying that they are NOT prohibited from possessing firearms. LiveSCAN and a DOJ clearance is required prior to registration for this course. LiveSCAN application is provided by WESTEC. Physical agility test, DMV printout, drug screening, medical clearance, and reading and writing assessment are also required. Approval of equivalent enrollment eligibility is not a guarantee that state regulatory and licensing authorities will also grant equivalency for licensure or employment purposes. Required by Statute.  
Description: Course provides students with the competencies set forth by Peace Officer Standards and Training (P.O.S.T.) to obtain a position as an entry-level peace officer. Covers introduction to law enforcement, administration of justice, criminal law, evidence and investigation, community-police relations, patrol procedures traffic control, juvenile procedure, physical fitness, defensive tactics, firearms, first aid and CPR, vehicle operations, domestic violence, field training, and evaluation, and other related basic law enforcement topics.  
Hours: 5 lecture, 864 lab  
Transferable: Not transferable. Not degree applicable.

**ADMJ B81 Special Topics for Security Guards**  
0.2 unit  
Description: Provides the required training security guards must complete within six months of employment as a security guard. Also covers the annual review and practice of security guard skills. Course meets the training requirements as set forth by the California Department of Consumer Affairs, Bureau of Security and Investigative Services.  
Hours: 8 lecture  
Repeat: unlimited  
Transferable: Not transferable. Not degree applicable.

**AGBS - Agriculture Business Management Courses**

**AGBS B2 Agricultural Economics**  
3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: Course covers the role of agriculture in the economic system. Basic economic principles are applied to agriculture production, pricing and marketing. Emphasis placed on effects of state and federal farm programs on production agricultures economic position.  
C-ID: AG + AB 124  
Hours: 54 lecture  
Transferable: CSU and private colleges; CSU GE D.2; BC GE D.2
AGRI - Agriculture Courses

AGRI B1 Agriculture, Environment, and Society
3 units
Recommended: BC placement into reading level 06.
Description: Involves the sociology of agriculture presented through an examination of relationships between societies and their environments, economics, and agriculture. Emphasis on the analysis of agriculture's use of technology and the corresponding impact on the environment, economy, and society. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College.
Hours: 54 lecture
Transferable: CSU and private colleges; CSU GE D.7; BC GE D.2

AGRI B49 Agriculture Leadership Training
2 units
Description: Agriculture leadership training through the application of individual and group leadership techniques. Requires participation as: an Agriculture Ambassador team member in the promotion and understanding of California agriculture, participation in college recruitment activities (including giving recruitment presentations at off campus sites), hosting prospective student groups for on-campus visitations, and sponsoring recruitment activities for the local Agriculture industry. Field trips required.
Note: Elective credit only.
Hours: 18 lecture, 54 lab
Transferable: CSU and private colleges.

AGRI B3 Sheep Production
3 units
Description: Defines and appraises all segments of the sheep industry focusing on production, reproduction, marketing, and wool. History and development of important breeds and their contributions to the U.S. sheep industry will be emphasized. Selection, nutrition, health management, handling, and processing will be defined, analyzed, and applied.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ANSC - Animal Science Courses

ANSC B1 Introduction to Animal Science
3 units
Recommended: BC placement into reading level 06.
Description: Survey of the livestock industry, supply of animal products and their uses; special emphasis on the origin, characteristics, adaptation and contributions of farm animals to the global Ag industry; analysis of the economic trends and career opportunities in animal agriculture. Nutrition, digestive systems, breeds, selection, and reproduction are included in course. Field trips may be required.
C-ID: AG + AS 104
Hours: 36 lecture, 54 lab
Transferable: UC, CSU and private colleges; BC GE B.1

ANSC B2 Beef Production
3 units
Recommended: Successful completion of ANSC B1 with a grade of C or better and BC placement into reading level 06.
Description: Defines and appraises all segments of the beef industry, focusing on production, reproduction, marketing, and processing. History and development of important breeds and their contribution to the U.S. beef industry will be emphasized. Selection, nutrition, health management, handling, and processing will be defined, analyzed, and applied.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ANSC B4 Dairy Production
3 units
Description: Defines and appraises all segments of the dairy industry focusing on production, reproduction, marketing and milk/dairy processing. History and development of important breeds and their contribution to the U.S. dairy industry will be emphasized. Selection, nutrition, health management, handling, and processing will be defined, analyzed and applied.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ANSC B7 Animal Diseases
3 units
Description: Covers major and common diseases of farm livestock, focusing on the cause, symptoms, treatment and prevention of the specific diseases. Students will learn fundamentals of the immune system and use of vaccines and pharmaceuticals. Safe use, particularly in food animals is stressed.
Hours: 54 lecture
Transferable: CSU and private colleges.

ANSC B10 Horse Production
3 units
Recommended: Successful completion of ANSC B1 with a grade of C or better and BC placement into reading level 06.
Description: Survey of the equine industry, encompassing the evolution and role of the equine species throughout history, breed selection and development, nutrition, disease, preventative health, reproductive management, basic horsemanship, and stabalizing alternatives. Lab required. Field Trips
may be required.
C-ID: AG-AS 116L
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

**ANSC B11 Livestock Selection and Evaluation**
3 units
Description: Detailed analysis of visual, analytical, and physical methods of appraising beef, sheep, swine and horses concerning functional and economic value; written and oral summaries of evaluation; specific reference made to performance data and factors determining carcass value. Lab required.
Hours: 36 lecture, 54 lab
Transferable: UC, CSU and private colleges

**ANSC B22 Animals and Society**
3 units
Recommended: BC placement into reading level 06.
Description: Deals with the human/animal bond and the positive/controversial aspects of animals in human lives. Includes topics covering the scientific and psychological implications of animals in our society. Students will encounter and analyze social and ethical issues that affect society and veterinary medicine.
Hours: 54 lecture
Transferable: UC, CSU and private colleges

**ANSC B48WE Occupational Work Experience Education**
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for animal science related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).
Transferable: CSU and private colleges

**ANSC B83 Introduction to Veterinary Technology**
4 units
Description: Introductory course designed to orientate and instruct students in knowledge required for success in advanced veterinary technology courses. Topics include: anatomy and physiology of domestic animals (Integumentary, cardiovascular, respiratory, reproductive, gastrointestinal, and neurological systems), nutrition, pharmacology, basics of chemistry, biology, microbiology, (including cellular anatomy/physiology), genetics and heredity, and career opportunities. Occupational terminology, regulations, office management and record keeping skills are also covered, as they pertain to working in a veterinary practice. Field trips may be required. Occupational Education.
Note: formerly ANSC B80 and ANSC B82.
Hours: 72 lecture
Transferable: Not transferable. Degree applicable.

**ANSC B84 Small Animal Diseases**
1.5 units
Prerequisites: ANSC B83 with a grade of ‘C’ or better.
Description: Presents knowledge of diseases in small domestic animals, including prevention and treatment programs. Includes instruction in physical diagnosis and discussion of tests and procedures needed for proper diagnosis that the technician uses to assist veterinarian. Also covers animal husbandry procedures relating to disease prevention. Disease entities to be taught include: mechanical, genetic, infectious, nutritional, endocrine, and metabolic conditions.
Hours: 27 lecture
Transferable: Not transferable. Degree applicable

**ANSC B85 Large Animal Diseases**
1.5 units
Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grades of C or better.
Description: Covers diseases in large animals, including diagnosis, prevention, and treatment programs. Includes instruction in physical diagnosis and discussion of tests and procedures needed for proper diagnosis. Instruction in animal nursing and husbandry procedures relating to disease prevention will also be included. Disease entities taught include infectious, nutritional, endocrine, mechanical and metabolic conditions.
Hours: 27 lecture
Transferable: Not transferable. Degree applicable.

**ANSC B86 Pharmacology for Veterinary Technicians**
1.5 units
Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with a grade of C or better.
Description: Instruct students with required knowledge of pharmacological and biological agents used in veterinary medicine, including calculations, classifications, action, and methods of administration, dispensing and labeling. FDA, USDA, and DEA guidelines regarding restricted and scheduled drugs, as they relate to small animals and residue avoidance in food animals. Dosages, agents, and administration of pharmaceuticals are covered.
Hours: 27 lecture
Transferable: Not transferable. Degree applicable.

**ANSC B88 Surgery, Dental, and Anesthesiology for Veterinary Technicians**
1.5 units
Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grade of C or better.
Description: Instruction in the identification and care of instruments, the importance of asepsis and sterilization techniques, surgical pack preparation, anesthetic instrumentation, induction and monitoring, surgical nursing, assisting and instrumentation, and suturing techniques used in veterinary medicine.
Hours: 27 lecture
Transferable: Not transferable. Degree applicable.

**ANSC B90 Emergency Medicine, Surgery/Nursing Procedures for Veterinary Technicians**
2 units
Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grade of C or better.
Description: Provides the student with knowledge required to recognized and provide emergency and critical care to veterinary patient, including establishing a patent airway, administering oxygen, controlling hemorrhage, performing CPR, and stabilizing patient to prevent and/or treat shock.
Hours: 36 lecture
Transferable: Not transferable. Degree applicable.
ANSC B92 Clinical Pathology for Veterinary Technicians
2 units
Prerequisite: Successful completion of either ANSC B83 or both ANSC B80 and ANSC B82 with grade of C or better.
Description: Course covers biology, microbiology, parasitological cytology, urinalysis, hematology, serology, and pathology necessary for a career as a Registered Veterinary Technician. The student will be instructed in normal and abnormal test values. Course covers the understanding, reading and application of specific test results, as well as specimen handling and necropsy techniques.
Hours: 36 lecture
Transferable: Not transferable. Degree applicable.

ANTH B2 Introduction to Cultural Anthropology
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Scientific study of contemporary cultures and their lifeways. Focuses on behavioral patterns, learning, diversity, and culture as an adaptive mechanism. Emphasis is on examining the constituents of cultural systems holistically, and comparatively analyzing world cultures. Examples from cultures worldwide are presented in various formats.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.1; BC GE D.2

ANTH B3 Introduction to Archaeology
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Scientific study of past cultures and culture change. Emphasizes reconstruction of past lifeways through systematically examining material remains. Topics include fieldwork techniques, data analysis, dating methods, cultural change and adaptation, interpreting behavior patterns of past cultures, interactions between cultures and environments, and managing archaeological remains. Field trips may be required.
Hours: 54 lecture
C-ID: ANTH 150
Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.1; BC GE D.2

ANTH B5 North American Indians
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Detailed examination and comparative study of Native Peoples of North America from initial peopling of the New World to today. Topics include Native Peoples today, policies and laws, culture areas of North America, and specific cultures. Emphasis on pre-contact lifeways, cultural interactions, and cultural adaptations to environmental situations through time.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.1; CSU GE D.3; BC GE D.2

ARCH - Architecture Courses

ARCH B1 Intro to Architecture and Environmental Design
1.5 units
Description: Familiarization with the professional fields of architecture, landscape architecture, structural engineering construction and city/regional planning. Introduction to schools of architecture programs as they relate to individual aptitudes and the design process. Guest speakers.
Note: Satisfies 0.5 unit counseling requirement for graduation from Bakersfield College.
Hours: 27 lecture
Transferable: CSU and private colleges.
ARCH B6 Materials of Construction
3 units
Description: Use of application of construction processes and materials. Field trips required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ARCH B11 Design and Perspective Drawing
4 units
Description: Basic techniques used in graphic communications for the environmental design fields including orthographic projection, pictorials, perspectives, shades and shadows. Exercises to develop basic skills and speed in the representation of ideas.
Hours: 36 lecture, 108 lab
Transferable: UC, CSU and private colleges

ARCH B12 Design, Drawing and Color
4 units
Prerequisite: Successful completion of ARCH B11 or equivalent with a grade of C or better.
Description: Drawing as a communication tool in the environmental design fields with further development of freehand and digital drawing with the addition of color application. Demonstrates the link between graphics, design process and communications. Field trips may be required.
Hours: 36 lecture, 108 lab
Transferable: UC, CSU and private colleges

ARCH B16 Digital Tools for Graphics Communication
3 units
Description: An introduction to the use of digital tools in architectural design and visual communication in the areas of 3D modeling, image editing, 2D graphics and page layout.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges

ARCH B21 Architectural Design Fundamentals I
4 units
Prerequisite: Successful completion of ARCH B1 and B11 and B12 or equivalent with a grade of C or better.
Description: Theories, principles, methods and means pertaining to the creation of two-and three-dimensional visual organizations to communicate intended concepts and meanings. Field trips required.
Materials Fee: $15.00
Hours: 36 lecture, 108 lab
Transferable: UC, CSU and private colleges

ARCH B22 Architectural Design Fundamentals II
4 units
Prerequisite: Successful completion of ARCH B21 or equivalent with a grade of C or better.
Description: Continuation of the content and issues introduced in ARCH B21 plus the theories, principles, methods and means pertaining to the creation of architectural forms, space and organizations and incorporation of function and light as issues that shape the built environment and support the communication of intended concepts and meanings. Field trips required.
Materials Fee: $15.00
Hours: 36 lecture, 108 lab
Transferable: UC, CSU and private colleges

ARCH B30 Residential Building Information Modeling
4 units
Prerequisite: Successful completion of ARCH B6 with a grade of C or better.
Description: Introduction to the application of computers in architecture with the use of Building Information Modeling (BIM), including operating systems, applications and graphic systems as they relate to construction documents and design technology. Residential wood construction methods and processes including construction documents. Not open to students who have successfully completed ARCH B31 and/or ARCH B32.
Materials Fee: $15.00
Hours: 36 lecture, 108 lab
Transferable: CSU and private colleges

ARCH B33 Architectural Computer Practice
3 units
Prerequisite: Successful completion of ARCH B30 with a grade of C or better.
Description: This course uses computer applications as a communication instrument in the design development and construction document phases of a light commercial project. Theory and application of laws and codes as they affect such buildings are studied. Fields trips required.
Materials Fee: $15.00
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges

ARCH B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student’s qualifications and objectives.
Description: College credit for architecture related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).
Transferable: CSU and private colleges

ARCH B55 Residential Building Codes
3 units
Recommended: BC placement into reading level 06.
Description: Study of the uniform building codes, local codes and related ordinances. Fundamental structural concepts involved in code work, code interpretation and enforcement. Field trips required.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

ARCH B56 Commercial Codes
3 units
Recommended: BC placement into reading level 06.
Description: Study of the uniform building, plumbing, mechanical and electrical codes as they relate to Commercial Construction. A companion course to ARCH B55 offering a greater in-depth study of the various codes which make up the Code of Building Regulations. Field trips may be required.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.
ART - Art Courses

ART B1 Art Appreciation
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Lecture course which presents a broad introduction to the visual arts from prehistory to the present. The role of art in the creation of world culture, as well as art processes and visual vocabulary are examined. Intended for non-Art majors.
Hours: 54 lecture
C-ID: ARTH 100
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

ART B2 Drawing I
3 units
Recommended: BC placement into reading level 06.
Description: Course introduces the fundamentals of representational drawing. The visual vocabulary and design principles and elements are covered, as related to drawing. Media may include pencil, ink, charcoal, conte, pastels, and watercolor.
Hours: 27 lecture, 81 lab
C-ID: ARTS 110
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

ART B3 Drawing II
3 units
Prerequisite: Successful completion of ART B2 or equivalent with a grade of C or better.
Description: A continuation of ART B2. Course builds on the conceptual and technical aspects of drawing; as well as an increased exploration of media and techniques. An increased use of color is required.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

ART B4 Two-Dimensional Design
3 units
Recommended: BC placement into reading level 06.
Description: Course examines the principles and elements of two-dimensional design. Content includes: elements and principles of design, color theory, art terminology and analysis of form and content.
Note: Not open to students who have successfully completed ART B3A, ART B3B, or ART B3AB.
C-ID: ARTS 100
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

ART B5 Three Dimensional Design
3 units
Recommended: BC placement into reading level 06.
Description: An introduction to form, structure, the elements of design and three dimensional design theory. This course includes an exploration of various materials and techniques, with an emphasis on the creative process.
Hours: 27 lecture, 81 lab
C-ID: ARTS 101
Transferable: UC, CSU and private colleges; BC GE C.1

ART B6 Acrylic Painting I
3 units
Prerequisites: Successful completion of ART B2 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Introduction to principles, elements, and practices of painting. Focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter.
Note: Not open to students who have successfully completed ART B4A, B4B or ART B4AB.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

ART B7 Acrylic Painting II
3 units
Prerequisites: Successful completion of ART B6 or equivalent with a grade of C or better.
Description: A continuation of ART B6. Students review and refine techniques using acrylic paint as an expressive medium. Emphasis is placed upon personal explorations.
C-ID: ARTS 200
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

ART B8 Figure Drawing I
3 units
Prerequisites: Successful completion of ART B2 or equivalent with a grade of C or better.
Description: An introductory course in drawing from live models. Emphasis is placed upon an understanding of the structure, anatomy, and expression of the human figure. Media may include pencil, ink, charcoal, conte, pastels, and watercolor. Not open to students who have successfully completed ART B2E, ART B2F, or ART B2EF.
C-ID: ARTS 100
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

ART B9 Figure Drawing II
3 units
Prerequisites: Successful completion of ART B8 or equivalent with a grade of C or better.
Description: Drawing course, using live models, is a review and refinement of drawing techniques and exercises that are introduced in ART B8. Emphasis is placed upon a more personal expression of the human figure. Media may include pencil, ink, charcoal, conte, pastels, and watercolor.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

ART B10 Ceramics I
3 units
Recommended: BC placement into reading level 06.
Description: An introductory level ceramics course in which students design and construct hand-built and wheel-thrown ceramic objects. Students learn form and surface enrichment, use glazes, and load kilns. Serves students interested in developing fundamental ceramic skills.
Materials Fee: $15.00 for finished ceramic artwork, glazes, and some clay.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges; BC GE C.1
ART B11 Ceramics II
3 units
Prerequisites: ART B10 or equivalent with a grade of ‘C’ or better.
Description: A continuation of ART B10. Expanding the skills in forming techniques, wheel throwing and slab construction; various glaze applications. Exploration of building and surface treatments including slip casting, site specific and installation work. Raku and other firing techniques are covered.
Materials Fee: $15.00 covers cost of glazes and some clay, and students will receive finished ceramic artwork.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

ART B12 Ceramics III
3 units
Prerequisite: Successful completion of ART B11 or equivalent with a grade of C or better.
Description: Designed for students interested in developing a personal style in their work. Advanced wheel-throwing and hand building techniques, glaze application and formulation. Includes theory and practical application of kiln operation, electric and gas fired, oxidation and reduction.
Materials Fee: $15.00 covers cost of glazes and some clay, and students will receive finished ceramic artwork.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

ART B13 Sculpture I
3 units
Prerequisite: Successful completion of ART B5 with a grade of C or better.
Description: Introduces sculptural concepts and investigates their translation into three-dimensional forms. Problems involving various technical means are explored. Students investigate the role of materials and techniques in the creative process.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges; CSU GE C.1

ART B14 Sculpture II
3 units
Prerequisite: Successful completion of ART B13 with a grade of C or better.
Description: Advanced study in sculptural concepts and three-dimensional forms. Explores the expressive meaning of form and the expressive potential of materials.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges; CSU GE C.1

ART B16 Digital Photography
3 units
Recommended: BC placement into reading level 06.
Description: Introduction to the possibilities of digital photography. Topics covered include digital cameras, scanning, printing, color management and file management. Students create original images for use in class, and explore photo manipulation with raster software. A suitable digital camera is required.
Materials Fee: $15.00 covers cost of ink and paper for printing student projects. Students receive a portfolio of prints.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges; BC GE C.1

ART B17 Black and White Photography
3 units
Recommended: BC placement into reading level 06.
Description: In this black and white photography course, students study the basic principles of cameras, optics, light, film development, exposure, exposure meters, and enlarging. Photographic quality, exploration of the photographer’s environment, and personal expression is emphasized. A suitable 35mm film camera is required.
Materials Fee: $25.00
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges; BC GE C.1

ART B20 Digital Art - Vector
3 units
Prerequisites: Successful completion of ART B20 and either ART B16 or ART B24 with grade of C or better.
Description: A foundational course introducing vector art and the use of digital technology as a design tool. Through a series of projects, students create original artwork and explore elements and principles of design.
Materials Fee: $15.00 for toner and paper. Students will receive a portfolio of printed work.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges; BC GE C.1

ART B24 Digital Art - Raster
3 units
Prerequisites: Successful completion of ART B20 and ART B24 or equivalent with a grade of C or better.
Description: This course focuses on effective typographic usage in visual media. Students explore the evolution of type from ancient to contemporary, and create original typographic design solutions. Projects feature investigation of structure, format, legibility, and expression.
Materials Fee: $15.00 for toner and paper. Students receive a portfolio of printed work.
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges; BC GE C.1

ART B25 Typography
3 units
Prerequisites: Successful completion of ART B20 and ART B24 or equivalent with a grade of C or better.
Description: This course introduces students to multiple digital mediums used for creating multimedia productions. This project based course teaches students to work with production gear such as tripods, cameras, and storage media. Students will learn best practices for digital workflows and the management of a variety of digital assets.
Hours: 27 lecture, 81 lab

ART B26 Multimedia
3 units
Prerequisites: Successful completion of ART B20 and either ART B16 or ART B24 with grade of C or better.
Description: This course introduces students to multiple digital mediums used for creating multimedia productions. This project based course teaches students to work with production gear such as tripods, cameras, and storage media. Students will learn best practices for digital workflows and the management of a variety of digital assets.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

**ART B29 Special Studies in Art**
1-3 units
Prerequisites: Limitation on Enrollment - student must have successfully completed a sequence of courses within an art discipline or exhibit skills equivalent to student learning outcomes for a specific discipline in art as determined by the portfolio review by the professor.
Description: Independent study course intended for students pursuing deep exploration into a specific body of work. Content and unit credit are determined by instructor and student in consultation. Enrollment by permission of instructor only.
Hours: 54 lab hours for each unit (54-162)
Transferable: CSU and private colleges.

**ART B35 Survey of Western Art I**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This course is a historical survey of Western architecture and visual arts beginning in the Paleolithic age (30,000 BC) and continuing through Proto-Renaissance Europe (1400 CE).
Hours: 54 lecture
C-ID: ARTH 110
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**ART B36 Survey of Western Art II**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This lecture course is a historical survey of Western architecture and visual arts from 1400 CE to the present day.
C-ID: ARTH 120
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**ART B37 Survey of Art - Latin America**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Historical survey of the arts in Latin America. Focuses on the Spanish-speaking regions of the Americas, as well as Cuba and the Dominican Republic. Students examine artistic contributions by Latin American artists from pre-history through colonial and modern art forms.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**ART B40 Digital Illustration**
3 units
Prerequisites: Successful completion of ART B25 with a grade of C or better.
Description: Course introduces illustration for editorial, technical, scientific, and informational publication. Emphasis is placed on problem solving and the importance of concept development. Typography is considered as an integral element to illustration projects.
Materials Fee: $15.00 for toner and paper. Students receive a portfolio of printed work.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

**ART B41 Advertising Design**
3 units
Prerequisites: Successful completion of ART B25 with a grade of C or equivalent with a grade of C or better.
Description: Course focuses on the design of advertising. Through concept development, type and images, students create original advertising solutions. A broad study of advertising media will be explored.
Materials Fee: $15.00 for toner and paper. Students will receive a portfolio of printed work.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

**ART B42 Graphic Design**
3 units
Prerequisites: Successful completion of ART B40 and ART B41 or equivalent with a grade of C or better.
Description: This course focuses on the design of visual communication. Through concept development, type, and images, students create original design solutions. Corporate identity and branding development is introduced.
Materials Fee: $15.00
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

**ART B43 Video Production**
3 units
Prerequisites: Successful completion of ART B26 with a grade of C or better.
Description: This course will introduce students to the fundamental elements and concepts of non-linear video editing. Through this project based learning course students will learn the foundations of editing. Material covered will include shooting digital video, asset acquisition, editing, rendering, and uploading media to online platforms such as YouTube and Vimeo.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

**ART B44 Motion Graphics**
3 units
Prerequisites: Successful completion of ART B26 with a grade of C or better.
Description: This course will cover all of the foundational elements of motion graphics. Through a series of short form productions, students will learn how to set up projects, how to prepare assets for motion, how to key frame those assets, and how to render a final composition. Students will learn about the connection between motion and music with a culminating short film exploring this connection.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

**ART B45 Animation**
3 units
Prerequisites: Successful completion of ART B43 and ART B44 with a grade of C or better.
Description: In this project-based course, students will take a hands on approach to learning the art of animation. Through pre-production, production, and post production, students will create an series of animated films.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

**ART B46 Advanced Photography I**
3 units
Prerequisites: Successful completion of ART B16 or ART B17 or equivalent with a grade of C or better.
Description: Course focus is on review and refinement of photography skills, with an emphasis on personal expression. A suitable SLR camera is required.
Materials Fee: $15.00
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

**ART B47 Advanced Photography II**
3 units
Prerequisites: Successful completion of ART B46 or equivalent with a grade of C or better.
Description: Course is a study of photography in an area of specialized and personal interest. Advanced work is done in camera technique, printing practices and studio lighting. Students create technically proficient work of an expressive and original nature. A suitable SLR camera is required.
Materials Fee: $15.00
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

**ART B48 Advanced Photography III - Independent Study**
1-3 units
Prerequisites: Successful completion of ART B47 or equivalent with a grade of C or better.
Description: Strengthening of graphic visualization and technical skills through challenging individual assignments, in preparation for professional experience. A suitable manually adjustable camera is required. Content and unit credit are determined by the instructor and student in consultation. Must be taken for three units to count for the photography certificate. Enrollment by permission of instructor only.
Materials Fee: $15.00
Hours: 54 lab hours for each unit (54-162)
Transferable: CSU and private colleges

**ASL - American Sign Language Courses**

**ASL B1 American Sign Language 1**
4 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Study of the fundamentals of American Sign Language. Introduces basic vocabulary and grammatical structure of ASL, conversational strategies, numbers, fingerspelling, and non-verbal aspects of American Sign Language. Provides an overview of Deaf history and Deaf cultural values. Outside assignments require practice and assessment with video programs. Field trips required.
Hours: 72 lecture
Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

**ASL B2 American Sign Language 2**
4 units
Prerequisites: Successful completion of ASL B1 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06 and writing level 06.
Description: Continued study of the fundamentals of American Sign Language. Emphasizes conversational strategies such as keeping others informed, minimizing interruptions, and turn-taking, as well as grammatical forms such as verb agreement, negation, and role-shifting. Further instruction in specialized fingerspelling and numerical proficiency. Exploration of Deaf culture, emphasizing cultural norms and notable Deaf persons.
Outside assignments require practice and assessment with video programs. Field trips required.
Hours: 72 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

**ASL B3 American Sign Language 3**
4 units
Prerequisites: Successful completion of ASL B2 or equivalent with a grade of C or better.
Recommended: BC placement reading level 06 and writing level 06.
Description: Study of advanced aspects of American Sign Language. Emphasizes advanced narrative fluency. Focus on temporal aspects, when clauses, classifiers, and mouth morphemes. Develops advanced narrative skills such as inflecting verbs, durative aspect, and transitions. Discussion of various aspects of American Deaf culture with a focus on literary tradition.
Outside assignments require practice and assessment with video programs. Field trips required.
Hours: 72 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

**ASL B4 American Sign Language 4**
4 units
Prerequisites: Successful completion of ASL B3 or equivalent with a grade of C or better.
Recommended: BC placement reading level 06 and writing level 06.
Description: Continued study of advanced aspects of American Sign Language. Emphasizes receptive and expressive narrative fluency and Deaf rhetorical approaches. Focuses on specific linguistic aspects of ASL such as classifier combinations, role-shifting, conditionals, and expansion. Advanced practice with receptive and expressive fingerspelling. Also includes exploration of issues pertinent to Deaf culture.
Outside assignments require practice and assessment with video programs. Field trips required.
Hours: 72 lecture
Transferable: UC, CSU and private colleges; IGETC 6.A; BC GE C.2

**ASL B6 American Deaf Culture**
3 units
Prerequisites: Successful completion of ASL B3 or equivalent with a grade of C or better.
Recommended: BC placement reading level 06 and writing level 06.
Description: Introduction to the practical and philosophical components of American Deaf culture, such as types and causes of deafness and the Deaf community as defined according to
language, values, culture, and attitudes. Included is a study of Deaf advocacy, services, education, and legal rights of Deaf people. Field trips required.

Hours: 54 lecture
Transferable: UC, CSU and private colleges

**ASL B7 American Sign Language Literature**
3 units
Prerequisites: Successful completion of ASL B3 or equivalent with a grade of C or better.
Recommended: BC placement reading level 06 and writing level 06.
Description: Exploration of storytelling, folktales, and plays of the American Deaf community. Study and performance of ASL storytelling, hand-shape and ABC stories. Study of Deaf folklore and other forms of “oral” storytelling traditions. Criticism and analysis of Deaf plays in written English.
Hours: 54 lecture
Transferable: UC, CSU and private colleges, BC GE C.2

**ASL B62 Fingerspelling, Numbers & Classifiers**
3 units
Prerequisites: Successful completion of ASL B2 or equivalent with a grade of C or better.
Description: This course will focus on fingerspelling, numbers and Classifiers. We will be working towards comprehension and knowledge of the process of fingerspelling and ability to produce fingerspelling appropriately. Students will also work on expanding their use of ASL by incorporating Classifiers in their interpreting.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

**ASL B63 Ethics and Decision Making**
3 units
Prerequisites: Successful completion of ASL B4 with a grade of C or better.
Description: This course will introduce the professional code of conduct used by various professional interpreting organizations. Students will explore individual ethics and subjective belief systems along with techniques used to remain unbiased in professional situations/contexts. Students will apply their training to real-life scenarios such as medical, educational, mental health, and other settings.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

**ASL B64 Introduction to Translation**
3 units
Prerequisites: Successful completion of ASL B4 with a grade of C or better.
Description: Focus primarily on building extensive specialized vocabularies essential for gaining sign language fluency and conversational competence for professionals working with Deaf and Hard of hearing individuals.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

**ASL B66 Introduction to the Interpreting Profession**
3 units
Prerequisites: Successful completion of ASL B4 with a grade of C or better.
Description: This course will introduce students to the profession of sign language interpreting. Topic will include, history of sign language interpreting, history of professional organizations, evolution of interpreting models, professional practices, hearing versus deaf culture, job market prospects, and the process of interpreting.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

**ASL B68 Interpreting I**
4 units
Prerequisites: Successful completion of ASL B64 with a grade of C or better.
Description: This course will provide students with the cognitive and practical skills necessary for interpreting between American Sign Language and English. This will include discourse analysis of the source and target language. Students will develop the steps necessary to effectively produce an equivalent target language message through translation, consecutive interpreting, and peer collaboration. This course will help students develop a stronger foundation in features of ASL.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

**ASTR - Astronomy Courses**

**ASTR B1 Physics of the Cosmos**
3 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.
Recommended: BC placement into writing level 06 and math level 02.
Description: Introductory course emphasizing the application of physics to understand the physical processes on the Earth and beyond the Earth and how we know those processes are occurring while still being bound to the Earth or our solar system. The process and philosophy of science are examined from the astronomical perspective. Among topics included: the motions, properties, and evolution of the Sun, planets (including exoplanets), stars, galaxies, and the universe and how we know about them; the analysis of electromagnetic radiation; atomic structure; astronomical instruments; brief history of astronomy; Newton’s law of gravity; general relativity.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

**ASTR B2 Life in the Universe**
3 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.
Specialist. Service (Parts Counter Person), 3) Warranty Specialist and 4) DMV

The positions are: 1) Service Writer/Adviser, 2) Parts-Sales and operations of automotive dealerships/businesses and shops.

Employment in four positions within the service management necessary to prepare traditional and non-traditional students for

Description: The course covers critical knowledge and skills

Prerequisites: Successful completion of AUTO B11 or equivalent

4 units

Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

ASTR B3 Solar System
3 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Introductory course on the Sun, Earth, other planets, moons, rings, comets, asteroids, and extra-solar planets, formation and development of the Earth and solar system, and possibility of life on other worlds.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

AUTO - Automotive Technology Courses

AUTO B11A Introduction to Automotive Technology
4 units
Recommended: Reading - one level prior to transfer.
Description: Introduction to the operation and maintenance of the modern automobile with emphasis on the theory of the basic operating systems. These systems include a) the engine and its systems (lubrication, cooling, fuel emissions controls), b) electrical systems (battery, starting, charging, lighting, and ignition), c) the chassis (suspension, wheel alignment, steering, brakes, tires, and wheels), and d) the drive line (clutch, standard, and automatic transmissions, universal joints and differential).
Not open to students with credit in AUTO B1, B1A, or B1B.
Hours: 54 lecture, 54 lab
Transferable: CSU and private colleges, elective credit only

AUTO B3 Fundamentals of Automotive Management and Services
4 units
Prerequisites: Successful completion of AUTO B11 or equivalent with a grade of C or better.
Description: The course covers critical knowledge and skills necessary to prepare traditional and non-traditional students for employment in four positions within the service management operations of automotive dealerships/businesses and shops. The positions are: 1) Service Writer/Adviser, 2) Parts-Sales and Service (Parts Counter Person), 3) Warranty Specialist and 4) DMV Specialist.

Hours: 54 lecture, 54 lab
Transferable: CSU and private colleges.

AUTO B10 Automotive Safety
0.5 unit
Description: Introductory course on the scientific search for life in the universe. The process and philosophy of science are examined from the astronomical and biological perspectives. Among topics included: the definition and nature of life, the formation and development of the Earth and life on the Earth, other places in our solar system that might have habitats for life, habitable zones around other stars, how we detect extrasolar planets, how we could detect biological activity on extrasolar planets, the search for extraterrestrial intelligence, interstellar travel, and implications of making contact.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

AUTO B11 Introduction to Automotive Technology
4 units
Prerequisites: Successful completion of AUTO B10 with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: This is an introductory automotive course that provides students with theory, knowledge, and skills necessary to understand the basic engine, drive-train, and other support systems. The lab component of the class will focus on general inspection procedures, maintenance and light repair work that is common in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Prepares students for Automotive Maintenance and Light Repair (G1) ASE exam. This course is a prerequisite to most of the automotive courses. Not open to students who have previously received credit for AUTO B1AB.
Hours: 54 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

AUTO B20 Engine Theory, Design and Diagnosis
4 units
Prerequisites: Successful completion of AUTO B11 with a grade of C or better.
Description: This course offers the students the advanced skills required for accurate diagnosis and repair of internal combustion engines. The theory and construction of gasoline and diesel engines found in automotive, agricultural and industrial applications will be covered. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Students are encouraged, but not required, to supply their own project. Preparation for the ASE A1 and A8 exams will be covered. Not open to students who have previously received credit for AUTO B2A.
Hours: 54 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

AUTO B21 Upper Engine Systems and Machining
4 units
Prerequisites: Successful completion of AUTO B20 with a grade of C or better.
Description: This course offers the students the advanced skills required for accurate repair and machining of the cylinder head and valvetrain systems in gasoline and diesel engines found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Students are encouraged, but not required, to supply their own project. Preparation for the ASE A1 and A8 exams will be covered. Not open to students who have previously received credit for AUTO
B2A. Hours: 54 lecture, 54 lab Transferable: Not transferable. Degree applicable.

**AUTO B22 Lower Engine Systems and Machining**
5 units
Prerequisites: Successful completion of AUTO B21 with a grade of C or better.
Description: This course offers the student the advanced skills required for accurate repair and machining of the cylinder block, crankshaft and connecting rods in gasoline and diesel engines found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Students are encouraged, but not required, to supply their own project. Preparation for the ASE A1 and A8 exams will be covered. Not open to students who have previously received credit for AUTO B2B.
Hours: 72 lecture, 54 lab Transferable: Not transferable. Degree applicable.

**AUTO B23 Engine Assembly and Performance**
5 units
Prerequisites: Successful completion of AUTO B22 with a grade of C or better.
Description: This class offers the student the application of engine overhaul theory and repair procedures, including reassembly, initial startup and tuning of gasoline and diesel engines found in automotive, agricultural and industrial applications. Advanced engine theory, design, practical and theoretical high performance modifications are all part of this course. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Students are encouraged, but not required, to supply their own project. Preparation for the ASE A1 and A8 exams will be covered. Not open to students who have previously received credit for AUTO B2B.
Hours: 72 lecture, 54 lab Transferable: Not transferable. Not degree applicable.

**AUTO B30 Electrical and Electronic Systems**
4 units
Prerequisites: Successful completion of AUTO B11 with a grade of C or better.
Description: This is an introductory electrical course that provides students with theory, knowledge, and skills necessary to understand electrical flow and electronic concepts. Instruction is given and lab experience provided which will enable students to successfully perform diagnostics and repair on basic electrical and electronic circuits found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Preparation for the ASE A6 and California State Lamp Adjuster examination will be covered. Not open to students who have previously received credit for AUTO B14.
Hours: 54 lecture, 54 lab Transferable: Not transferable. Degree applicable.

**AUTO B31 Advanced Electrical and Electronic Systems**
5 units
Prerequisites: Successful completion of AUTO B30 with a grade of C or better.
Description: This is an advanced course that provides students with theory, knowledge, and skills necessary to understand advanced automotive electronic diagnostic and repair concepts. Instruction is given and lab experience provided which will enable students to successfully perform diagnostics, pinpoint tests, and employ advanced circuit test strategies on electrical and electronic circuits. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. The course prepares students for the A-6 and L3 ASE exams. Not open to students who have previously received credit for AUTO B14.
Hours: 54 lecture, 54 lab Transferable: Not transferable. Degree applicable.

**AUTO B33 Engine Performance**
4 units
Prerequisites: Successful completion of AUTO B20 with a grade of C or better.
Description: This course offers the student the skills required for accurate diagnosis and repair of fuel, emission, and engine management systems related to engine performance. The theory and construction of engine performance systems found in automotive, agricultural and industrial applications will be covered. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. The course prepares students for the A-8 engine performance ASE exam. Not open to students who have previously received credit for AUTO B15.
Hours: 54 lecture, 54 lab Transferable: Not transferable. Degree applicable.

**AUTO B34 Advanced Engine Performance**
5 units
Prerequisites: Successful completion of AUTO B33 with a grade of C or better.
Description: This course offers the student the advanced skills required for accurate diagnosis and repair of fuel, emission, and engine management systems related to engine performance. The theory and construction of advanced engine performance systems found in automotive, agricultural and industrial applications will be covered. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. The course prepares students for the A-8 and L1 ASE exams. Not open to students who have previously received credit for AUTO B15.
Hours: 72 lecture, 54 lab Transferable: Not transferable. Degree applicable.

**AUTO B36 Light Duty Diesel Performance**
4 units
Prerequisites: Successful completion of AUTO B33 with a grade of C or better.
Description: This course offers the student the advanced skills required for accurate diagnosis and repair of diesel engines. The theory and construction of diesel engine systems found in automotive, agricultural and industrial applications will be covered. Students will also study various manufacturers’ engine platforms and examine how diesel power and performance is achieved. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. The course prepares students for the A9 and L2 ASE exams.
Hours: 54 lecture, 54 lab Transferable: Not transferable. Degree applicable.
AUTO B39 Level 1 and Level 2 Smog Inspector Training
4 units
Prerequisites: Successful completion of AUTO B10 with a grade of C or better.
Description: This is a Bureau of Automotive Repair certified course which includes Level 1 and Level 2 certificate training. The Level 1 (L1) Engine and Emission Control training is intended to provide students with fundamental knowledge of engine and emission control theory, design, and operation. The Level 2 (L2) Smog Check Training is intended to provide students with the knowledge, skills, and abilities needed to perform Smog Check inspections. Students who successfully pass both Level 1 and Level 2 training courses will have met the eligibility requirements to take the Smog Check Inspector State License examination. Hours: 54 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

AUTO B40 Suspension, Steering and Wheel Alignment
4 units
Prerequisites: AUTO B11 or AUTO B30 with a grade of ‘C’ or better.
Description: This course provides the students with theory, knowledge, and skills necessary to accurately diagnose and repair suspension and steering systems. Instruction is given and lab experience provided for removal, disassembly, inspection, re-assembly, installation and wheel alignment of suspension and steering systems found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. The course prepares students for ASE A-4 Suspension and Steering Systems Certification exam. Not open to students who have previously received credit for AUTO B106.
Hours: 54 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

AUTO B43 Brake Systems
4 units
Prerequisites: Successful completion of AUTO B11 or AUTO B30 with a grade of C or better.
Description: This course provides the students with theory, knowledge, and skills necessary to accurately diagnose and repair brake systems on passenger cars, light trucks, and heavy duty applications. Instruction is given and lab experience provided for removal, disassembly, inspection, re-assembly, precision measurement, machining, and installation of braking systems found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles may be used. The course prepares students for the A-5 Brake ASE and California state Brake Adjuster Certification examination. Not open to students who have previously received credit for AUTO B106.
Hours: 54 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

AUTO B46 Automatic Transmissions
5 units
Prerequisites: Successful completion of AUTO B11 or AUTO B30 with a grade of C or better.
Description: This is an advanced level course that provides the students with theory, knowledge, and skills necessary to accurately diagnose and repair automatic transmissions and transaxles. Instruction is given and lab experience provided for removal, disassembly, inspection, re-assembly and installation of transmissions and transaxles found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Prepares students for ASE A-2 Automatic Transmission and Transaxle Certification examination. Not open to students who have previously received credit for AUTO B112.
Hours: 72 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

AUTO B48 Manual Transmissions and Drivetrain
4 units
Prerequisites: AUTO B11 or AUTO B46 with a grade of ’C’ or better.
Description: This is an advanced level course that provides the students with theory, knowledge, and skills necessary to accurately diagnose and repair manual transmissions and drivetrains. Instruction is given and lab experience provided for removal, disassembly, inspection, re-assembly and installation of manual transmissions and drivetrains found in automotive, agricultural and industrial applications. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Prepares students for ASE A-3 Manual Drive Train and Axles Certification examination.
Hours: 54 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

AUTO B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for automotive technology related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 SS253.
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).
Transferable: Not transferable. Degree applicable.

AUTO B49 Automotive Air Conditioning
4 units
Prerequisites: Successful completion of AUTO B10 with a grade of C or better.
Description: This course offers the student the skills required for accurate service, diagnosis and repair of heating and air conditioning systems. The theory and construction of heating and air conditioning systems found in automotive, agricultural and industrial applications will be covered. Demonstrated lecture, simulated problem diagnosis and practical application on “live” vehicles will be used. Preparation for the ASE A7 and T7 exams will be covered.
Hours: 54 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

AUTO B59 Automotive Air Conditioning
4 units
Recommended: Reading – one level prior to transfer.
Description: Prepares for the ASE A7 and T7 exams. Safety, principles and theory of automotive air conditioning systems, laboratory practice in the service and repair of automotive heating, ventilation and air conditioning components.
Hours: 54 lecture, 54 laboratory
Transferable: Not transferable. Degree applicable.
AUTO B75D Advanced Engine Machining
3 units
Prerequisites: Successful completion of AUTO B75C or equivalent with a grade of C or better.
Description: Application of engine overhaul theory and procedures, including component inspection and tolerances, is covered in this class. Advanced engine theory, design, diagnosis, repair, practical and theoretical high performance modifications are all part of this course. This class also provides additional lab hours during which the students will complete specific lab tasks associated with this class.
Materials Fee: $15.00
Hours: 18 lecture, 108 lab
Transferable: Not transferable. Degree applicable.

BIOL - Biology Courses

BIOL B3A General Biology I
5 units
Prerequisites: BC placement into reading level 06 and math level 04 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B70 or equivalent with a grade of C or better.
Description: This course is intended for biology majors. It is considered a survey course, as it covers basic biology and the diversity of unicellular and multicellular organisms. This course also emphasizes general biological principles, classification, structure, function and evolutionary adaptations of organisms (including plants, fungi, animals, and unicellular organisms) to their environments.
Hours: 54 lecture, 108 lab
C-ID: BIOL B135S (When BIOL B3A and B3B are both taken)
Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

BIOL B3B General Biology II
5 units
Prerequisites: Successful completion of CHEM B1A with or equivalent with a grade of C or better.
Description: Principles of cell biology, molecular biology, metabolism, biochemistry, molecular genetics, and physiology. Field trips required.
Hours: 54 lecture, 108 lab
C-ID: BIOL 135S (When BIOL B3A and B3B are both taken)
Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE Area B.1

BIOL B11 Concepts of Biology
4 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.
Description: A non-majors introductory course that applies biological concepts to issues of everyday life. Concepts considered include scientific method; ecosystems and energy flow; organization, structure, function, behavior and evolution of organisms; inheritance; disease; ethics. Field trips may be required.
Hours: 54 lecture, 54 lab
Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

BIOL B16 General Microbiology
5 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 and BIOL B3A or BIOL B3B or BIOL B32 or BIOL B133 or BIOL B20 and CHEM B11 or CHEM B1A or CHEM B18 or equivalent with a grade of C or better.
Description: Introduction to the study of microorganisms including: survey of microorganisms, history of microbiology, microbial control through physical and chemical agents, bacterial genetics and biogenetic engineering, bacterial metabolism, bacterial, fungal, protozoal, helminth and viral diseases by transmission. In addition, immunology, public health epidemiology, nosocomial infections, and microbial applications to food, water and sewage treatment are discussed. Field trips required.
Hours: 54 lecture, 108 lab
Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

BIOL B18 Essentials of Human Anatomy and Physiology
4 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.
Description: An integrated life science course specifically targeted for students in allied health programs. Topics include microscopic and gross anatomy as well as physiology of all human organ systems; skeletal, muscular, cardiovascular, lymphatic/immune, respiratory, digestive, excretory, nervous, endocrine, reproductive and integumentary. Additional topics will address cell structure and function, human development and human heredity.
Hours: 54 lecture, 54 lab
Transferable: CSU and private colleges; CSU GE B.2; CSU GE B.3; BC GE B.1

BIOL B21 Special Projects in Biology
0.5-2 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better and any college biology course with a grade of C or better.
Description: Individually directed work in biology lab. Students will learn biological preparation, and/or development of teaching materials while assisting in a biology lab.
Hours: 27 lab hours for each .5 unit (27-108)
Transferable: CSU and private colleges.

BIOL B32 Human Anatomy and Physiology I
4 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.
Description: This is the first part of a two-semester integrated anatomy and physiology sequence that covers the structure, function, integration and homeostasis of the human body at the cellular, tissue, organ, organ system and organism level, including the integumentary, skeletal, muscular, nervous, sensory, cardiovascular, lymphatic, immune, respiratory, urinary, digestive, endocrine, and reproductive systems. This series meets the diverse needs of students seeking careers in such allied health fields as nursing, pharmacy, and physician’s assistant. It is strongly recommended that students complete the entire Anatomy and Physiology sequence at the same institution as
the material may not be covered in the same semester order at different schools. Therefore students taking one semester at one school may not be given credit for the same semester at a different school.

Note: Completion of BIOL B32 and B33 is equivalent to C-ID BIOL 115S, where credit is given for both Human Anatomy (C-ID BIOL 110) and Human Physiology (C-ID BIOL 112) by completing a two-semester blended course. BIOL B32 or BIOL B33 alone do not give credit for C-ID BIOL 110 (Anatomy) or C-ID BIOL 112 (Physiology) but only 4 units for a GE lab science.

Hours: 54 lecture, 54 lab
C-ID: BIOL 115S (When BIOL B32 and B33 are both taken)
Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

**BIOL B33 Human Anatomy and Physiology II**

4 units

Prerequisites: Successful completion of BIOL B32 with a grade of C or better.

Description: This is the second part of a two-semester integrated anatomy and physiology sequence that covers the structures, function, integration and homeostasis of the human body at the cellular, tissue, organ, organ system and organism level, including the integumentary, skeletal, muscular, nervous, sensory, cardiovascular, lymphatic, immune, respiratory, urinary, digestive, endocrine, and reproductive systems. This series meets the diverse needs of students seeking careers in such allied health fields as nursing, pharmacy, and physician's assistant. It is strongly recommended that students complete the entire Anatomy and Physiology sequence at the same institution as the material may not be covered in the same semester order at different schools. Therefore, students taking one semester at one school may not be given credit for the same semester at a different school.

Note: Completion of BIOL B32 + BIOL B33 is equivalent to C-ID BIOL 115S, where credit is given for both Human Anatomy (C-ID BIOL 110) and Human Physiology (C-ID BIOL 112) by completing a 2 semester blended course. BIOL B32 or BIOL B33 alone do not give credit for C-ID BIOL 110 (Anatomy) or C-ID BIOL 112 (Physiology) but only 4 units for a G.E. lab science.

Hours: 54 lecture, 54 lab
C-ID: BIOL 115S (When BIOL B32 and B33 are both taken)
Transferable: UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; CSU GE B.3; BC GE B.1

**BSAD - Business Administration Courses**

**BSAD B1 Financial Accounting**

4 units

Prerequisites: BC placement into reading level 06 and math level 04 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B70 or equivalent with a grade of C or better.

Description: This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics.

Hours: 72 lecture
C-ID: ACCT 110
Transferable: UC, CSU and private colleges

**BSAD B2 Managerial Accounting**

3 units

Prerequisites: Successful completion of BSAD B1 or equivalent with a grade of C or better.

Description: This is the study of how managers use accounting information in decision-making, planning, directing operations, and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Includes issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments.

Hours: 54 lecture
C-ID: ACCT 120
Transferable: UC, CSU and private colleges

**BSAD B5 Human Relations and People Skills**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A behavior approach to the business environment including self-understanding, motivation techniques as related to the workplace and issues affecting morale, discrimination and developing leadership techniques for success. Provides insight on the effects of drugs and alcoholism on the individual and work group. Emphasizes career selection and the important facets of communication and skill building.

Hours: 54 lecture
Transferable: CSU and private colleges.

**BSAD B9 Fundamentals of Marketing**

3 units

Recommended: BC placement into reading level 06.

Description: Survey of marketing, including consumer behavior, company and environmental analysis, market segmentation, product development, pricing, promotion, and distribution.

Hours: 54 lecture
Transferable: CSU and private colleges.

**BSAD B18 Business Law**

3 units

Recommended: BC placement into reading level 06.

Description: Fundamental legal principles pertaining to business transactions. Introduction to the legal process. Topics include sources of law and ethics, contracts, torts, agency, criminal law, business organizations, and judicial and administrative processes.

Hours: 54 lecture
C-ID: BUS 125
Transferable: UC, CSU and private colleges.

**BSAD B20 Introduction to Business**

3 units

Recommended: BC placement into reading level 06.

Description: A survey in business providing a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human
behavior interact to affect a business organization’s policy and practices within the U.S. and a global society. Demonstrates how these influences impact the primary areas of business including: organizational structure and design; leadership, human resource management, organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, financial practices; the stock and securities market; and therefore affect a business ability to achieve its organizational goals.

Hours: 54 lecture
C-ID: BUS 110
Transferable: UC, CSU and private colleges; BC GE D.2

BSAD B40 Personal Finance
3 units
Recommended: BC placement into reading level 06 and math level 03.
Description: Principles and skills of budgeting, making intelligent consumer choices related to consumer credit, banking services, insurance, taxes, transportation, investing for personal retirement, and real estate planning.
Hours: 54 lecture
Transferable: CSU and private colleges.

BSAD B43 Principles of Management
3 units
Recommended: BC placement into reading level 06.
Description: A study of formal organizations, the organizational environment and organizational planning and control. Topics include the nature of complex organizations, decision-making, small group studies and individual behavior. Also included are planning theory, systems management, and non-formal behavior.
Hours: 54 lecture
Transferable: CSU and private colleges.

BSAD B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for business related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).
Transferable: CSU and private colleges.

BSAD B51 Business Mathematics
3 units
Description: Basic arithmetic skills reviewed and applied to the solution of business problems. Emphasizes bank records, invoices, cash and trade discounts, markup and markdown, inventory valuation, payroll, simple and compound interest, promissory notes, installment buying, stocks and bonds, amortization, real estate loans, property tax, personal income tax, depreciation, and insurance.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B53A Introduction to Accounting 1
3 units
Recommended: BC placement into reading level 05.
Description: An introduction to modern financial accounting theory and practice. Analysis of financial transactions using the rules of double-entry bookkeeping. Accounting cycle including adjusting entries, the expanded worksheet, the use of special journals, bank reconciliations and the preparation of financial statements.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B53B Introduction to Accounting 2
3 units
Prerequisites: Successful completion of BSAD B53A or equivalent with a grade of C or better.
Description: A continuation of an introduction to modern financial accounting theory and practice. Analysis of financial transactions peculiar to the partnership and inventory, accounts receivable, notes payable, notes receivable and drafts, depreciation, depletion and amortization, capital stock transactions, bonds and other long-term liabilities and Statement of Cash Flows.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B54 Payroll Accounting
3 units
Prerequisites: Successful completion of BSAD B1 or BSAD B53A or equivalent with a grade of C or better.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B55 Computer Accounting Applications
3 units
Prerequisites: Successful completion of BSAD B1 or BSAD B53B or equivalent with a grade of C or better.
Description: Review and practical application of accounting principles, electronic spreadsheets, word processing and data management as they pertain to solution of accounting problems and situations on a microcomputer. Emphasizes analysis of problems and student initiative to solve the problems presented using computerized software available.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B61 Human Resources Management
3 units
Description: A comprehensive study and review of human resources management. The course focus is on strategic planning, the nature and function of hiring, recruitment, training, development and retention of employees and staff. Topics include performance appraisals, compensation, motivation, retraining, disciplinary action, labor relations, and contract negotiations. The course also emphasizes federal, state, and local laws as they apply to employers and employees in both the private and public sectors.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B65 Principles of Organizational Communication
3 units
Description: Examination of written and oral communication in the business world. Course will examine the processes of human behavior and communication within the organizational context. It will test the principles of English writing skills and communication in the business office. Focuses on writing letters, memorandums, e-mails, resumes, reports and oral presentations. Course will define the barriers to effective communication and teach the appropriate techniques to overcome poor communication skills.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B85 Business English
3 units
Description: Basic English grammar course focusing on nouns, pronouns, verbs, adjectives, adverbs, conjunctions, and prepositions. Also includes standard punctuation, capitalization, number usage, and vocabulary development.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B88 Office Procedures
3 units
Description: A finishing course for students completing their training in office assisting. Course focuses on the techniques currently taking place in the office environment and is designed to develop knowledge and skills necessary for success in the workplace. Topics such as job attitudes, communications, human relations, and time and stress management are featured. Also included are telephone techniques, processing mail, travel arrangements, appointment scheduling, arranging meetings, the job application process, and interviewing techniques.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B90 Fundamentals of Retailing
3 units
Description: Principles and practices used in management of retail businesses. Includes site selection, layout, organization, staffing, positioning, customer service, promotional techniques, and all aspects of the critical buying function.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

BSAD B252A Computer Keyboarding, Part 1 1 unit
Description: Students learn the basic techniques of the touch system in the mastery of the alpha/numeric keyboard and develop speed and accuracy in keying data. This is a basic course in the Office Technology curriculum and is a life-long skill.
Hours: 54 lab
Transferable: Not transferable. Degree applicable.

BSAD B252B Computer Keyboarding, Part 2 1 unit
Prerequisites: Successful completion of BSAD B252A or equivalent with a grade of C or better.
Description: A continuation course where students learn the basic techniques of the touch system in the mastery of the alpha/numeric keyboard and develop speed and accuracy in keying data. They also develop the basic formatting skills necessary to produce letters, memorandums, reports, and tables. This is a basic course in the Office Technology curriculum and is a life-long skill.
Hours: 54 lab
Transferable: Not transferable. Degree applicable.

BSAD B252C Computer Keyboarding, Part 3 1 unit
Prerequisites: Successful completion of BSAD B252B or equivalent with a grade of C or better.
Description: The third part in the series where students learn the basic techniques of the touch system in the mastery of the alpha/numeric keyboard and develop speed and accuracy in keying data. They also develop the basic formatting skills necessary to produce letters, memorandums, reports, and tables. This is a basic course in the Office Technology curriculum and is a life-long skill.
Hours: 54 lab
Transferable: Not transferable. Degree applicable.

BSAD B253A Document Processing, Part 1 1 unit
Prerequisites: Successful completion of BSAD B252C or equivalent with a grade of C or better.
Description: Further develops keyboarding speed, accuracy, and production rates on letters, reports, tables, forms, rough drafts, newsletters, and other documents using Microsoft Word applications. Emphasis is on producing usable copy for employment purposes and increasing keyboarding skill levels.
Open entry/open exit course with individualized instruction in a supervised lab.
Hours: 54 lab
Transferable: Not transferable. Degree applicable.

BSAD B253B Document Processing, Part 2 1 unit
Prerequisites: Successful completion of BSAD B253A or equivalent with a grade of C or better.
Description: The second part in the series where student further develops keyboarding speed, accuracy, and production rates on letters, reports, tables, forms, rough drafts, newsletters, and other documents using Microsoft Word applications. Emphasis is on producing usable copy for employment purposes and increasing keyboarding skill levels.
Open entry/open exit course with individualized instruction in a supervised lab.
Hours: 54 lab
Transferable: Not transferable. Degree applicable.

BSAD B253C Document Processing, Part 3 1 unit
Prerequisites: Successful completion of BSAD B253B or equivalent with a grade of C or better.
Description: The third in the series where student further develops keyboarding speed, accuracy, and production rates on letters, reports, tables, forms, rough drafts, newsletters and other documents using Microsoft Word applications. Emphasis is on producing usable copy for employment purposes and increasing keyboarding skill levels.
Open entry/open exit course with individualized instruction in a supervised lab.
Hours: 54 lab
BSAD B264 Ten-Key Proficiency
0.5 unit
Description: Skill and proficiency in the use of the ten-key calculator by touch and the application of such skill and proficiency in the solution of the more frequently encountered business problems. Open entry/open exit course with individualized instruction in a supervised lab.
Hours: 27 lab
Transferable: Not transferable. Degree applicable.

BSAD B280 Machine Transcription
1.5 units
Prerequisites: Successful completion of BSAD B252C and BSAD B85 or BSAD B285 with a grade of C or better.
Description: Students learn the skill of operating transcribing machines and develop skill in keying documents while listening to dictated material. Practice in transcribing letters, memoranda, and other business correspondence is stressed. Course emphasizes English usage, punctuation, spelling/word usage, and proper document formatting when transcribing data. Open entry/open exit course with individualized instruction in a supervised lab.
Hours: 81 lab
Transferable: Not transferable. Degree applicable.

BSAD B285 Business English
3 units
Description: Basic English grammar course focusing on nouns, pronouns, verbs, adjectives, adverbs, conjunctions, and prepositions. Also includes standard punctuation, capitalization, number usage, and vocabulary development.
Hours: 162 lab
Transferable: Not transferable. Degree applicable.

BSAD B287 Filing
1.5 units
Description: Training in principles of filing and records management according to the Association of Records Managers and Administrators (ARMA). Study and practice in filing by alphabetic, numeric, geographic, and subject methods. Open entry/open exit course with individualized instruction in a supervised lab.
Hours: 81 lab
Transferable: Not transferable. Degree applicable.

BSAD B280 Machine Transcription
1.5 units
Prerequisites: Successful completion of BSAD B252C and BSAD B85 or BSAD B285 with a grade of C or better.
Description: Students learn the skill of operating transcribing machines and develop skill in keying documents while listening to dictated material. Practice in transcribing letters, memoranda, and other business correspondence is stressed. Course emphasizes English usage, punctuation, spelling/word usage, and proper document formatting when transcribing data. Open entry/open exit course with individualized instruction in a supervised lab.
Hours: 81 lab
Transferable: Not transferable. Degree applicable.

BSAD B285 Business English
3 units
Description: Basic English grammar course focusing on nouns, pronouns, verbs, adjectives, adverbs, conjunctions, and prepositions. Also includes standard punctuation, capitalization, number usage, and vocabulary development.
Hours: 162 lab
Transferable: Not transferable. Degree applicable.

BSAD B287 Filing
1.5 units
Description: Training in principles of filing and records management according to the Association of Records Managers and Administrators (ARMA). Study and practice in filing by alphabetic, numeric, geographic, and subject methods. Open entry/open exit course with individualized instruction in a supervised lab.
Hours: 81 lab
Transferable: Not transferable. Degree applicable.

CADM - Correctional Administration Courses

CADM B54 Corrections Officer Core Course
12 units
Description: This course is designed to meet the Corrections Standards Authority requirements for entry-level Corrections Officers in Adult Detention Facilities. This course covers various legal issues in dealing with incarcerated offenders as well as supervision of inmates. Transportation, report writing, blood borne pathogens, CPR, First Aid, receiving and releasing of inmates, weaponless defense, Fire and Life Safety.
Hours: 216 lecture

CADM B56 Criminal Justice Training-Special Topics
0.5-7 units
Description: This is a series of workshop/seminar sessions devoted to instruction in specialized topics pertinent to criminal justice administration. The course will feature speakers or panels of specialists from the law enforcement or corrections fields who have expertise in the particular subject area.
Hours: 8 lecture hours for each .2 unit (9-126)
Transferable: Not transferable. Not degree applicable.

CADM B58 Supervisor Core Course
4.5 units
Description: This course teaches supervisory skills such as supervisory role identification, leadership styles, values, ethics, principles, assertive leadership, employee performance appraisals, liability issues and legal updates, discipline, employee counseling, planning and organization, communication, investigations, report review, and team building. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections (STC) Program.
Hours: 81 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70A Prisoner Transportation
0.5 units
Description: This course teaches skills associated with the transportation of prisoners and covers various modes of prisoner transportation, the risks involved, and how to achieve a secure transportation, including the application and use of mechanical restraints. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections (STC) Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70B Prison Gangs
0.5 units
Description: Topics include identifying known prison gangs, gang member identification/activities, policies on gang validation, gang recruitment measures, interviewing techniques and protective custody measures for gang dropouts. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Note: Registration will be held during the first hour of the first class meeting.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70C Escape Prevention
0.5 units
Description: Teaches escape prevention procedures that deal primarily with basic institutional security principles, accountability of inmates, human error, and techniques used for escape prevention. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
People. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**CADM B70D Suicide Prevention**  
0.5 units  
**Description:** Covers identifying the potential for suicide, prevention techniques, intervention and responses including proper communication techniques during a crisis. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70E Handling Aggressive and Assaultive Inmates**  
0.5 units  
**Description:** Provides training to corrections staff. Examines the violent criminal, explains the reasons for inmate violence, and offers tools to de-escalate confrontations. Provides demonstrations and an opportunity to practice evasive defense tactics. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70F Sexual Harassment Prevention**  
0.5 units  
**Description:** Identifies Sexual harassment from a legal, moral, and social concept. Provides advice and counsel on how to prevent sexual harassment in the workplace. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70G Understanding Prejudice**  
0.5 units  
**Description:** Teaches tolerance of others who are unlike oneself, to make for cultural differences, values and beliefs. Adjusts preconceptions and misconceptions, attitudes and encourages communication styles without implications of discrimination. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70H Crime Scene Preservation and Investigation**  
0.5 units  
**Description:** Provides the required competencies to identify a crime scene, preserve evidence, mark and collect physical, trace and transient evidence. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70I Anger Management**  
0.5 units  
**Description:** Designed to provide students with tools to control their own anger as well as provide a process to deal with angry people. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70J Informant Development and Management**  
0.5 units  
**Description:** Provides the communication tools and legal framework necessary for successful implementation, use and protection of informants in a correctional institution. This course meets the training requirements as set forth by the Corrections Standards authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70K Anatomy of a Set-Up; Games Inmates Play**  
0.5 unit  
**Description:** Students will develop a greater understanding of criminal thinking & behavior. This course will provide the student with the knowledge and communication skills to prevent or stop a set-up. Students will be able to identify and recite the signs and behaviors that contribute and make employees receptive to a set-up and to attempts at “game playing” by inmates.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70L Use of Force and Civil Liabilities**  
0.5 units  
**Description:** Students will identify and discuss specific trends in civil liabilities in the field of corrections with a focus on use of force. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70M Drug Recognition and Under the Influence**  
0.5 units  
**Description:** Prepares students to identify specific illicit drugs and the signs and symptoms of drug use and influence. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.

**CADM B70N Fire and Life Safety**  
0.5 units  
**Description:** Hands-on training for corrections institution staff in fire prevention and suppression. Provides the knowledge and skills necessary for fire and emergency responses. Topics include evacuation management, tactical control measures, use of fire suppression equipment, use of the SCBA, search and rescue techniques. Meets the certification requirements for Standards and Training in Corrections (STC) from the California Board of Corrections.  
Note: Registration will be held during the first hour of the first class meeting.  
**Hours:** 9 lecture  
**Transferable:** Not transferable. Not degree applicable.
CADM B70O Positive Inmate Staff Relations Through Communication and Ethics
0.5 units
Description: Develops practical communication and ethical skills toward a positive inmate/staff working relationship in a jail/institutional environment. This course meets the requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70P Emergency Procedures
0.5 units
Description: Designed for corrections staff. Provides an overview of various emergencies arising within a correctional facility, including natural disasters, riots, work strikes, escapes. Policy, planning and response are discussed. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70R Inmate Work Incentive Program
0.5 units
Description: Prepares students to supervise inmates in a correctional environment and provide a better understanding of prisoner programs. State law mandates that “every inmate shall have a reasonable opportunity to participate in a full-time credit qualifying assignment, consistent with institutional security and available resources.” This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70S Women in Corrections
0.5 units
Description: Explores the history of women in corrections and the career developments for women that have evolved in the field of corrections. Other topics include: special training needs, problems and restrictions placed on women, developing a mentoring program for the female correctional staff. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70T Blood Borne Pathogens, T.B. Awareness, Psychotic Inmates
0.5 units
Description: Learn how to prevent the transmission of blood borne pathogens; identify Tuberculosis awareness factors; recognize and deal with psychotic inmates. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70U Conflict Resolution and Hostage Survival
0.5 units
Description: Covers Conflict Resolution: develop skills to defuse and de-escalate confrontational situations. Course includes: tactics and techniques to avoid being taken hostage, and what to do if you are taken hostage in a correctional setting. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70V Facility and Inmate Searches
0.5 units
Description: Develops and enhances the knowledge and skills of searching both inmates and facilities. This course covers: searching techniques, clothed and unclothed body searches, and the current trends of introduction of contraband into a Correctional Facility. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70W Restraint Gear Application
0.5 units
Description: Provides explanation and hands-on practice for the proper application and use of restraints gear. Explains how some gear can be slipped, picked, shimmed or broken. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70X Cell Extraction
0.5 units
Description: Provides knowledge and skills to perform calculated and emergency cell extractions in a safe manner. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Note: Registration will be held during the first hour of the first class meeting.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B70Z Inmate Classification/Disciplinary Process
0.5 unit
Description: Provides an introduction to the inmate classification process. Describes the basic procedure for assigning an inmate to a particular job based on security level and defines how the disciplinary process is a part of the classification process. Class meets the certification requirements for Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.
CADM B71A Basic Principles in Management
1 unit
Description: An introduction to best practices of two-way communication between administration and line staff to ensure good facility management. Students will develop their leadership and communication skills. The art of discipline and grievances will be explored. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 18 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71F Drug and Alcohol Awareness for Supervisors
0.5 units
Description: Provides training to law enforcement, corrections and security supervisors (also recommended for educators). Prepares students to identify and determine whether an employee is under the influence of alcohol or drugs. Other topics include how supervisors can solicit help for employees to overcome substance abuse/addiction. The course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71G Advanced Report Writing
0.5 units
Description: This course is designed to provide advanced skills in report writing. Students will refresh and enhance the writing skills they developed in the basic course. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Note: Registration will be held during the first hour of the first class meeting.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71H Transportation and Escape Procedures
0.5 units
Description: Intended for peace officers, correctional officers, juvenile institutions staff, and probation officers. Introduces students to various modes of transportation of adult and juvenile inmates. Includes proper use of restraints and proper searching techniques. Covers risks and techniques to prevent escapes. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71I Violence in the Workplace
0.5 units
Description: A discussion of fatal and nonfatal violence in the workplace to determine the focus needed for prevention. Emphasis made on changes to help minimize or remove the risk of workplace violence. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71K Rights of Prisoners
0.5 unit
Description: An introduction and discussion of the rights and privileges that inmates have while they are incarcerated. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71L Progressive Discipline
0.5 units
Description: This course teaches methods of progressive discipline utilized in a correctional setting to ensure uniform consistency, avoid confusion, follow due process requirements, and create a positive behavior change among inmates. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71M Stress in the Corrections Environment
0.5 units
Description: Intended for people working in corrections. Course will identify and discuss what stress is, how it affects both the physical and mental health of individuals. Topics include identifying symptoms of stress, recognizable physical and psychological reactions to stress, and stress reducers/relaxation techniques. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71N Positive Thinking in Corrections
0.5 units
Description: This course identifies and discusses the premise that a positive attitude in the correctional workplace fosters job satisfaction, builds self-esteem, and reinforces desired performance. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71O Assertiveness Training for Corrections
0.5 units
Description: Trains Correctional Officers to present themselves as confident, effective communicators and therefore enjoy better inmate control and institutional effectiveness. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

CADM B71P Employee Post Trauma
0.5 units
Description: This course covers basic assessment tools, methods of coping, as well as tools and skills to facilitate post traumatic recovery. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.
participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B71Q Liability Issues and Courtroom Demeanor**

**0.5 units**

**Description:** This course is an introduction to the legal liabilities and responsibilities of corrections personnel while at work and expectancies when called to testify in a court of law. Other topics include: identification of adverse employees, insufficient training, and negligent supervision among others. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B71R Prison Rape Elimination Act (PREA)**

**0.5 units**

**Description:** Provides the skills necessary to investigate complaints, threats, or signs of sexual assault/rape against inmates. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B72 Chemical Agents**

**0.5 units**

**Description:** This course provides the required competencies and certification for the use of chemical agent sprays. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B73 Basic Baton Course**

**0.5 units**

**Description:** Provides students with the practical, safe, legal and technical aspects of the use of the police baton. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B74 Weaponless Defense and Control Tactics**

**0.5 units**

**Description:** This course provides training to perform their daily tasks with less danger to themselves and to increase their ability to control suspects and prisoners in a humane and lawful manner. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B75 Surviving Sharp Edged Weapons**

**0.5 units**

**Description:** The course teaches responses to the mounting threat of “knife culture” offenders. Topics covered included safe positioning, communicating commands to inmates, how to access an edged weapon assailant, evasive defensive tactics and disarming techniques. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 9 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B76 Basic Firearms Familiarization**

**0.5 units**

**Description:** Designed to give the first-time shooter hands-on experience as well as knowledge of the operation of a handgun and range safety. Students will engage in the use of firearms, which will include handgun familiarization; safety; care, cleaning and storage; firearms range qualification.

**SPECIAL NOTE:** Per Penal Code section 13511.5 students must obtain written clearance from the California Department of Justice verifying that they are not prohibited from possessing firearms.

**Note:** Registration will be held during the first hour of the first class meeting.

**Hours:** 9 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B77 Intermediate Firearms Course**

**1 unit**

**Description:** Designed to expand upon the skills and knowledge of firearms familiarity and range safety. Students will engage in the use of firearms, which will include safe handling; care, cleaning and storage; firearms range qualification.

**SPECIAL NOTE:** Per Penal Code section 13511.5, students must obtain written clearance from the California Department of Justice verifying that they are not prohibited from possessing firearms.

**Hours:** 18 lecture
**Transferable:** Not transferable. Not degree applicable.

**CADM B79 Federal Prison Emergency Response Training**

**4.5 units**

**Description:** This course teaches advanced training for Correctional Emergency Response Team (CERT) skills. Covers the duties of a CERT team member including transport of high risk inmates, extracting uncooperative prisoners from their cells, searches, high profile security, barricaded persons, mass arrest and responding to hostage situations. This course meets the Training for Corrections Standards Authority for counties participating in the Standards and Training for Corrections Programs.

**Hours:** 81 lecture
**Transferable:** Not transferable. Not degree applicable.
CHDV - Child Development Courses

CHDV B13C Child Growth and Development: The Infant Toddler Years
3 units
Recommended: BC placement into reading level 06.
Description: Study of theory, research, cognitive and sensory development of the Infant Toddler Years. Class will look at mother-child interactions as well as role of caregivers along with age appropriate curriculum and infant programs.
Hours: 54 lecture
Transferable: CSU and private colleges.

CHDV B20 Principles and Practices
3 units
Recommended: BC placement into reading level 06.
Description: An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs and environments. Emphasis is on the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and development for all children. Course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional identity. Formerly CHDV B20, Introduction to Child Growth and Development.
Hours: 54 lecture
C-ID: ECE 120
Transferable: CSU and private colleges.

CHDV B21 Child Growth and Development: Birth through Adolescence
3 units
Recommended: Successful completion of CHDV B20 with a grade of C or better and BC placement into reading level 06.
Description: Interdisciplinary study of physical, social, emotional, and cognitive and language development from conception through adolescence for both typical and atypical children. The family and broader cultural environments provide the context for the study. Topics include historical views of children, developmental theories, research methodology, and patterns of growth.
Hours: 54 lecture
C-ID: CDEV 100
Transferable: UC, CSU and private colleges; IGETC 4; CSU GE D.7; CSU GE E; BC GE D.1

CHDV B22 Observation and Assessment - Birth through Adolescence
3 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 and CHDV B21 or equivalent with a grade of C or better.
Description: Course includes acquisition and application of basic observation skills regarding children's physical, cognitive, language, social and emotional development from birth to adolescence.
Hours: 54 lecture
C-ID: ECE 200
Transferable: CSU and private colleges.

CHDV B32 Teaching in a Diverse Society
3 units
Description: The relationship between critical aspects of culture and the social-emotional development of children, adolescents and adults is analyzed from an anti-bias, multi-cultural perspective. Diversity is examined through the different values, beliefs, modes of communicating, behaving and perceiving the world.
C-ID: ECE 230
Hours: 54 lecture
Transferable: CSU and private colleges.

CHDV B33 Survey of Special Education
3 units
Recommended: BC placement into reading level 06.
Description: Introduction to special education in the public schools. Emphasizes legal aspects, assessment and placement. Includes examination of all disabilities served in the public schools and day care settings and the role of the child care professionals and paraprofessionals in the field of special education.
Hours: 54 lecture
Transferable: CSU and private colleges.

CHDV B36 Developmentally Appropriate Curriculum
3 units
Description: Planning for and implementation of developmentally appropriate curriculum for children ages birth - 8 years. Includes major concepts and theories of child growth and development for children in infant/toddler, preschool, kindergarten and early primary grades. Students will be expected to observe and assess classroom environments and provide an appropriate environment.
C-ID: ECE 130
Hours: 54 lecture
Transferable: CSU and private colleges.

CHDV B40 Creative Art, Movement, and Music Activities for Young Children
3 units
Recommended: BC placement into reading level 06.
Description: Materials, methods, and objectives in teaching art, movement, and music activities for children birth to six years old. The growth of creativity through developmentally appropriate activities, and communicating to parents the value of play will be emphasized. Meets Child Development Associated Options, Competencies #4-7.
Hours: 54 lecture
Transferable: CSU and private colleges.

CHDV B41 Supervised Field Experience in Early Childhood Education
3 units
Prerequisites: Successful completion of CHDV B20 and CHDV B21 and CHDV B36 and CHDV B42 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Basic techniques of working with children including promoting self-esteem; creativity; self-discipline; development of physical and cognitive skills; and planning appropriate curriculum, connections between theory and practice, development of professional behaviors, child centered approaches to teaching, learning, and assessment, implementing
and evaluating experiences that promote positive development and learning. The lab portion of this course includes supervised field experience working with children two to five years in age in a Child Development Center applying knowledge gained in lecture. Field trips may be required.

Note: Not open to students who have successfully completed CHDV B41A or CHDV B41B.

C-ID: ECE 210
Hours: 18 lecture, 108 lab
Transferable: CSU and private colleges.

CHDV B42 Child, Family, and Community
3 units
Description: Course includes the study of the socializing of children in developmental, family, and community contexts, with an emphasis on historical and socio-cultural factors. In addition, identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. Field trips may be required.
C-ID: CDEV 110
Hours: 54 lecture
Transferable: UC, CSU and private colleges; CSU GE D.7; CSU GE E

CHDV B45A Administration of Programs for Young Children: Business Procedures
3 units
Recommended: BC placement into reading level 06.
Description: Administration of programs for young children including private and publicly-funded child care centers and preschool programs. Emphasizes business procedures and public policy. Field trips required.
Hours: 54 lecture
Transferable: CSU and private colleges.

CHDV B45B Administration of Programs for Young Children: Personnel Management Procedures
3 units
Description: Administration of programs for young children including private and publicly-funded child care centers and preschool programs. Emphasizes personnel management and public policy.
Hours: 54 lecture
Transferable: CSU and private colleges.

CHDV B49 Child Health, Safety and Nutrition
3 units
Recommended: BC placement into reading level 06.
Description: Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development for all children. Pediatric CPR and First Aid certification are completed (books and certification costs are at the student’s expense) Totally fulfills California licensing mandate of 15 hours of training in preventative health practices.
C-ID: ECE 220
Hours: 54 lecture
Transferable: CSU and private colleges.

CHDV B52 Care of Infants and Toddlers with Disabilities
3 units
Description: Interdisciplinary course designed to prepare child care workers and education aides to care for disabled and chronically ill infants and toddlers.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

CHDV B53A Early Childhood Education: Adult Supervision
2 units
Description: A study of the methods and principles of supervising and teaching adults in early childhood classrooms. Emphasis is on the role of experienced classroom teachers who function as a supervisor and/or mentor for staff or new teachers in a child care environment while simultaneously addressing the needs of the children and parents.
Hours: 36 lecture
Transferable: Not transferable. Not degree applicable.

CHEM - Chemistry Courses

CHEM B1A General Chemistry I
5 units
Prerequisites: BC placement into reading level 06 and writing level 06 and math level 04 or successful completion of ACDV B50 or ACDV B61 or equivalent and ENGL B50 or equivalent and MATH B70 or equivalent CHEM B2A or High School Chemistry, or equivalent with a grade of C or better.
Recommended: Chemistry prerequisite accomplished within two years prior to taking this class.
Description: Continuation of CHEM B1A. Includes kinetics; equilibrium; thermodynamics; equilibrium as it applies to acid-base, solubility, and electrochemistry; nuclear chemistry; coordination chemistry; the descriptive chemistry of selected elements; and an introduction to organic chemistry. The lab includes qualitative analysis, quantitative techniques, and descriptive experiments.
C-ID: CHEM 120S (for taking both CHEM B1A AND CHEM B1B is the C-ID Equivalent of CHEM 120S)
Hours: 54 lecture, 108 lab
Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

CHEM B1B General Chemistry and Chemical Analysis
5 units
Prerequisites: BC placement into math level 04 or successful completion of MATH B70 and CHEM B1A or equivalent with a grade of C or better.
Recommended: Chemistry prerequisite accomplished within two years prior to taking this class.
Description: Continuation of CHEM B1A. Includes kinetics; equilibrium; thermodynamics; equilibrium as it applies to acid-base, solubility, and electrochemistry; nuclear chemistry; coordination chemistry; the descriptive chemistry of selected elements; and an introduction to organic chemistry. The lab includes qualitative analysis, quantitative techniques, and descriptive experiments.
C-ID: CHEM 120S (for taking CHEM B1A + B1B)
Hours: 54 lecture, 108 lab
Transferable: UC, CSU and private colleges
**CHEM B2A Introductory General Chemistry**  
4 units  
Prerequisites: BC placement into reading level 06 and writing level 06 and math level 03 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B60 or equivalent with a grade of C or better.  
Description: Course covers the principles and applications of general college chemistry. It is designed for liberal arts, physical education and some baccalaureate nursing majors. Recommended also for students who need additional background for the more intensive course, CHEM B1A.  
Note: Not open to students with credit in CHEM B1A.  
C-ID: CHEM 101  
Hours: 54 lecture, 54 lab  
Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1  

**CHEM B11 Introduction to General, Organic, and Biochemistry**  
5 units  
Prerequisites: BC placement into reading level 06 and math level 03 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B60 or equivalent with a grade of C or better.  
Description: An introduction to general, organic, and biochemistry using a qualitative and quantitative approach. Topics include physical principles of chemistry; inorganic compounds and reactions; a survey of organic chemistry-classification, compounds, reactions, nomenclature; biochemistry-classification, composition, reactions in living organisms.  
Hours: 54 lecture, 108 lab  
Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1  

**CHEM B18 Elementary Organic Chemistry**  
5 units  
Prerequisites: Successful completion of CHEM B1A or equivalent with a grade of C or better or CHEM B2A or equivalent with a grade of B or better or instructor's approval.  
Description: Introduction to and study of the chemistry of organic compounds: the functional groups, representative types of, theory behind, organic reactions, and the biological classes of proteins, fats, carbohydrates, and nucleic acids. Will prepare students well for further study in organic chemistry, and serve those interested in the sciences and related fields, including ones requiring a semester of organic chemistry for transfer/entrance. The lab covers fundamental techniques including separations, synthesis, identification, and instrumental analysis.  
Hours: 54 lecture, 108 lab  
Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1  

**CHEM B30A Organic Chemistry for Science Majors, I**  
5 units  
Prerequisites: Successful completion of CHEM B1B with a grade of C or better.  
Description: This is the first semester of a one-year course in organic chemistry intended for majors in the natural sciences (chemistry, biochemistry, biology, physics, pre-medicine, and related areas). Taken as a sequence, the course covers fundamental principles and concepts of organic chemistry including (but not limited to) bonding, molecular structure, the standard functional groups, nomenclature, stereochemistry, reactions, and mechanisms. Strong emphasis is placed on reaction mechanisms, stereochemistry, multi-step syntheses, and structure elucidation using hands-on modern instrumental methods (multinuclear NMR, FT-IR, GC, etc.). In addition, various modern computational techniques and an introduction to biomolecules are presented. The lab covers preparative and modern analytical techniques and instrumentation, exposure to a variety of reactions and procedures, performing multistep syntheses, and safety and ecologically friendly protocols.  
Hours: 54 lecture, 108 lab  
C-ID: CHEM 160S (Taking both CHEM B30A AND CHEM B30B is the C-ID Equivalent of CHEM 160S)  
Transferable: UC, CSU and private colleges; CSU GE B.1  

**CHEM B30B Organic Chemistry for Science Majors, II**  
5 units  
Prerequisites: Successful completion of CHEM B30A with a grade of C or better.  
Description: This is the second semester of a one-year course in organic chemistry intended for majors in the natural sciences (chemistry, biochemistry, biology, physics, pre-medicine, and related areas). Taken as a sequence, the course covers fundamental principles and concepts of organic chemistry including, but not limited to structure, bonding, nomenclature, stereochemistry, the standard functional groups, reactions, and mechanisms. Special emphasis is placed on reaction mechanisms, stereochemistry of reactions, multi-step syntheses, and structure elucidation using modern instrumental methods (multinuclear NMR, FT-IR, GC, etc.). In addition, various modern computational techniques and an introduction to biomolecules are presented.  
Hours: 54 lecture, 108 lab  
C-ID: CHEM 160S  
Transferable: UC, CSU and private colleges; CSU GE B.1  

**CNST - Construction Technology Courses**  

**CNST B1 Introduction to Construction**  
3 units  
Description: Basic concepts of the construction industry. Overview of careers in construction, related safety and math, print reading, and construction techniques investigated.  
Hours: 54 lecture  
Transferable: CSU and private colleges.  

**CNST B2 Estimating and Scheduling**  
3 units  
Recommended: Successful completion of CNST B1 with a grade of C or better, or one year work experience in the construction related industry and BC placement into reading level 06.  
Description: Techniques in managing and organizing a construction project including plan reading, estimating and scheduling are covered. The extraction of the information necessary to calculate quantities and costs is investigated. Use of computer programs to manage a construction project and to calculate the cost and keep track of the scheduling is explored and practiced. Practice and theory are pursued.  
Hours: 54 lecture  
Transferable: CSU and private colleges.
CNST B3 Construction Supervision and Project Management  
3 units  
Description: The combination of designing, estimating, contracting, financing and building must be understood and practiced. Leadership in this field means being responsible for many people, their work and their safety.  
Hours: 54 lecture  
Transferable: CSU and private colleges. Degree applicable.

CNST B4 Contractor's License Law  
2 units  
Description: Preparation for the California State Contractor Examination in any classification. Includes state license law, civil code, civil procedure, labor law, contract law, and asbestos regulations.  
Hours: 36 lecture  
Transferable: Not transferable.

CNST B5 Building Construction I  
4 units  
Description: Technical and practical experience to complete floor and wall framing of a house including underpinning, wall layout, and wall construction up to the ceiling joists. Estimating of materials, basic surveying, and concrete foundation formwork are also covered.  
Hours: 54 lecture, 54 lab  
Transferable: Not transferable.

CNST B6 Building Construction II  
4 units  
Description: The study of roof design and cutting, the use of the framing square in roof layout, and prefabrication techniques in housing with field research assignments. Frame estimating for the building trades and the application of various roofing materials are also covered.  
Hours: 54 lecture, 54 lab  
Transferable: Not transferable.

CNST B7 Residential Finish Construction  
4 units  
Description: This course covers interior and exterior building finishes, including layout fabrication and installation of stairs, door and window materials, construction, hardware and installation, interior and exterior millwork, molding and cabinetry; interior drywall and exterior siding, stucco plastering and EIFS systems. Building codes and finish estimating are included.  
Hours: 54 lecture, 54 lab  
Transferable: Not transferable.

CNST B8 Plumbing I  
4 units  
Description: A course designed to provide students with entry-level instruction involving the theory and skills of residential plumbing systems. Knowledge of basic principles, functions and design, as well as the physical ability to install and test the rough-in plumbing in a single family dwelling.  
Hours: 54 lecture, 54 lab  
Transferable: Not transferable.

CNST B9 Residential Electrical Wiring  
4 units  
Description: Residential electrical construction, wiring principles and practices, study and application of National Electrical Code (NEC) to comply with building requirements.  
Hours: 54 lecture, 54 lab  
Transferable: Not transferable.

CNST B10 Plumbing II  
4 units  
Description: A course designed to provide students with entry-level instruction involving the theory and skills of residential plumbing systems. Topics include basic principles, function, design, installation of finish plumbing, repair and service of plumbing systems, installation of solar, spa, and sprinkler systems in a single family dwelling.  
Hours: 54 lecture, 54 lab  
Transferable: Not transferable.

CNST B11 Residential Light Steel Frame Construction  
4 units  
Description: A comprehensive hands-on course that covers the fundamentals of utilizing light frame steel for residential framing in place of wood. Raised floor construction, wall framing, trussed roof fabrication and installation including applicable building codes, blueprint reading, estimating, and inspections are covered.  
Hours: 54 lecture, 54 lab  
Transferable: Not transferable.

CNST B48WE Occupational Work Experience Education  
1-8 units  
Prerequisites: Declared major or occupational goal and evaluation of student’s qualifications and objectives. Recommended: BC placement into reading level 06.  
Description: College credit for construction related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid work experience or 60 volunteer hours of work experience per unit. Repetition allowed per Title 5 55253.  
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).  
Transferable: Not transferable.

CNST B50A Residential Construction  
7 units  
Recommended: BC placement into reading level 06.  
Description: Intended to provide students with an overview of the construction profession. Various aspects of residential construction from site preparation through framing phases will be studied and performed. Special interest will be on construction safety, the initial phases of construction & investigation of emerging building trends & techniques. Finish carpentry & plumbing phases and techniques will also be introduced.  
Hours: 54 lecture, 216 lab  
Transferable: Not transferable. Degree applicable. (Pending deletion and replacement with new curriculum.)

CNST B50B Residential Construction  
7 units  
Recommended: BC placement into reading level 06.  
Description: Intended to provide students with an overview of the construction profession. Various aspects of residential construction from post rough framing to final completion will be
COMM - Communication Courses

COMM B1 Public Speaking
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Instruction in the composition, presentation and evaluation of original speeches and critical assessment of other communication events. Emphasizes topic selection, research, organization, development, delivery, audience analysis and critical analysis of persuasive communication.
Hours: 54 lecture
C-ID: COMM 110
Transferable: UC, CSU and private colleges; IGETC 1.C; CSU GE A.1; BC GE A.1

COMM B2 Interpersonal Communication
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: An introduction to interpersonal communication as it pertains to the exploration of the individual’s relationships to others and the broader society including romantic, friendship, family and professional relationships at every age. Emphasis will be on social, physiological and cultural influences such as social interaction, verbal communication, nonverbal communication, touch, human interaction and emotion that shape personal identity and interpersonal relationships, ethical communication founded on communication theory and research, and effective conflict resolution methods. Focus will also include participation in experiences designed to enhance competence and develop skills in interpersonal communication.
Hours: 54 lecture
C-ID: COMM 130
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

COMM B4 Persuasive Communication
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Principles and practices of persuasion in various communication settings. Prepare and deliver persuasive speeches for specific audiences.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 1.C; CSU GE A.1; BC GE A.1

COMM B5 Rhetoric and Argumentation
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Theoretical and practical aspects of argumentation and public debating to develop students’ critical thinking abilities. Emphasis is on composition, presentation, and evaluation of speeches in argumentative, debate, and advocacy contexts. Identification of public issues, research and organization of evidence, building sound and effective arguments, and facility with debate formats are the primary learning outcomes of this course. Introduces logical reasoning and builds competence with formal reasoning before applying those to argumentation and debate about public issues.
Hours: 54 lecture
C-ID: COMM 120
Transferable: UC, CSU and private colleges; CSU GE A.3; BC GE B.2

COMM B6 Intercultural Communication
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Introduction to intercultural communication in domestic and/or global contexts. Influence of cultures, languages, and social patterns on how members of groups relate among themselves and with members of different ethnic and cultural groups. Theory and knowledge of effective communication within and between cultures. Appreciation and comparison of communication among diverse groups within the larger context of American culture. Practical application of skills will be highlighted.
Hours: 54 lecture
C-ID: COMM 150
Transferable: UC, CSU and private colleges; IGETC 4.C, 4.G; CSU GE D.3; CSU GE D.7; BC GE D.1

COMM B7 Organizational Communication
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Course concentrates on a global look at communication in an organizational setting; theory and practice of communication in private and public organizations, interpersonal and group communication patterns within organizations, systems of ethical internal and external communication, leadership in the organization, organizational cultures impact on communication, and the role of communication in achieving organizational goals. Course includes team projects that will require work outside of class and visits to a community location of your teams choosing.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; CSU GE D.7; BC GE D.2

COMM B8 Small Group Communication
3 units
Description: This oral communication class examines small group processes such as group formation and development, conflict, problem solving, and group climate. Covers an understanding of diversity, leadership roles, and theory. Students participate in class groups where experiential learning and presentations are part of the class experience. Small group meetings outside of class time are required. Field trips may be required.
Hours: 54 lecture
C-ID: COMM 140
Transferable: UC, CSU and private colleges; IGETC 1.C; CSU GE A.1; BC GE A.1
COMP B9 Health Communication
3 units
Description: Course introduces student to the theory and practice of health communication in dyadic, small group, organizational, and mass media contexts. Students examine topics such as provider-client communication, the influence of diversity and culture on health communication, and the role that the mass media plays in disseminating health information. Selected topics and theories of human communication are directly applied to communication situations in health care settings through the use of case studies. Emphasis is on understanding and improving health communication among health professionals, between health professionals and clients, and with the general public.
Hours: 54 lecture
Transferable: CSU and private colleges.

COMP B10 Leadership and Communication
3 units
Description: Course presents theories of communication, leadership and followership as they explore the essential role communication plays in leadership at all levels. Course emphasizes the study of communication skills that are central to performing successfully as a leader in a variety of contexts including organizational, familial, team and public settings. Specific attention is given to self-assessment of leadership and communication skills, self-reflection, and creation of a personal leadership communication plan.
Note: Not open to students who have successfully completed COMM B49 or COMM B49B.
Hours: 54 lecture
Transferable: CSU and private colleges.

COMM B21 Oral Interpretation
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Study of the theoretical and technical aspects involved in the selection, analysis, interpretation and oral performance of various forms of literature, including poetry, prose, and drama (plays, scripts, and screenplays). Includes participation in various types of performance exercises including presentation of prose, poetry, drama and group ensemble.
Hours: 54 lecture
C-ID: COMM 170
Transferable: CSU and private colleges; BC GE C.2

COMP - Computer Science Courses

COMP B2 Introduction to Computer Information Systems
3 units
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.
Description: Introduction to the concepts of computer information systems as problem-solving tools in business, economics, mathematics, and the sciences. Includes the history of computer system components, and sequential and direct-access processing. Database management systems, teleprocessing, and distributed processing are covered. An overview of personal computer applications software (word processing, electronic spreadsheets, and personal database management systems) is also included.
Note: Not open to students who have successfully completed COMS B2, COMS B3, COMP B3.
C-ID: BUS 140
Hours: 54 lecture
Transferable: UC, CSU and private colleges

COMP B5 Introduction to Microsoft Office
3 units
Recommended: BC placement into reading level 06.
Description: Intended for home users and business people who desire a working knowledge of personal computer hardware and software. Special emphasis on software that is most widely used in Kern County as well as the nation. Mainly focuses on business and home applications of personal computers. Hands-on training with word processing, spreadsheets, database management systems, electronic presentations, and the necessary operating system fundamentals to the listed application software.
Note: Not open to students who have successfully completed COMS B5.
Hours: 54 lecture
Transferable: UC, CSU and private colleges.

COMP B10 Programming Concepts and Methodology I
3 units
Recommended: BC placement into reading level 06.
Prerequisites: BC placement into reading level 06 and math Level 04 or successful completion of ACDV B50 or ACDV B61 or equivalent and MATH B70 or equivalent with a grade of C or better.
Recommended: Successful completion of COMP B10 with a grade of ‘C’ or better or instructor approval.
Description: This course is an introduction to the discipline of computer science, with a focus on the design and implementation of algorithms to solve simple problems using a high-level programming language. Topics include fundamental programming constructs, problem-solving strategies, debugging techniques, declaration models, and an overview of procedural and object-oriented programming languages. Students will learn to design, implement, test, and debug algorithms using pseudocode and a high-level programming language.
Note: Not open to students who have successfully completed COMS B14.
Hours: 54 lecture
C-ID: COMP 112
Transferable: UC, CSU and private colleges
COMP B12 Programming Concepts and Methodology II
3 units
Prerequisites: Successful completion of COMP B11 or equivalent with a grade of C or better.
Description: This is a software engineering course focused on the application of software engineering techniques for the design and development of large programs. Topics include object-oriented programming, data abstraction, data structures and their associated algorithms, and recursion. Students will learn to design, implement, test, and debug programs using an object-oriented language.
Note: Not open to students who have successfully completed COMS B35.
Hours: 54 lecture
C-ID: COMP 132
Transferable: UC, CSU and private colleges

COMP B13 Computer Architecture and Organization
3 units
Recommended: Successful completion of COMP B11 with a grade of C or better.
Description: This course is an introduction to the organization and behavior of computer systems at the assembly language level. Topics include numerical computation, the internal representation of simple data types and structures, data representation errors, and procedural errors. Students will learn how to map statements and constructs of high-level languages onto sequences of machine instructions.
C-ID: COMP 142
Hours: 54 lecture
Transferable: UC, CSU and private colleges

COMP B14 Discrete Structures
3 units
Prerequisites: Successful completion of COMP B11 or equivalent with a grade of C or better.
Description: This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include functions, relations and sets, basic logic, proof techniques, basics of counting, graphs and trees, and discrete probability.
C-ID: COMP 152
Hours: 54 lecture
Transferable: UC, CSU and private colleges

COMP B21 Database Systems - Design & Structured Query Language (SQL)
3 units
Recommended: BC placement into reading level 06.
Description: Course emphasizes “best practices” for relational database design (modeling) and the use of Structured Query Language (SQL) for database manipulation. Normalization, data diagramming, concurrency and other key database concepts will be discussed. Microsoft Access, MySQL, Microsoft SQL Server, and other database management systems will be used to demonstrate concepts. Upon successful completion of this course, students will be able to design real world databases and manipulate them using SQL.
Note: Not open to students who have successfully completed COMS B34.
Hours: 54 lecture
Transferable: CSU and private colleges.

COMP B31 CompTIA Network Security - Security+
3 units
Recommended: BC placement into reading level 06.
Description: Course is designed for individuals interested in a career in computer network security. Course prepares students for the vendor-neutral CompTIA Security+ certification exam. Topics covered are: network security, types of security threats, security vulnerability assessment, access control fundamentals, authentication, cryptography, and risk mitigation.
Hours: 54 lecture
Transferable: CSU and private colleges

COMP B32 CompTIA Linux+
3 units
Recommended: BC placement into reading level 06.
Description: A general introduction to Linux Installation and Administration. Covers the essentials of installing, configuring, maintaining, administering and troubleshooting the Linux Operating System.
Note: Not open to students who have successfully completed COMS B41.
Hours: 54 lecture
Transferable: CSU and private colleges

COMP B33 CompTIA Networking Technologies - Network+
3 units
Recommended: BC placement into reading level 06.
Description: Designed for individuals interested in a career in computer networking. Course prepares students for the vendor-neutral CompTIA Network+ certification exam. Topics covered are: networking fundamentals, the OSI model, network protocols, logical and physical architectures in both local and wide area networks, the physical parts of a network (wiring, NICs, hubs, routers, bridges and switches), popular network operating systems, network troubleshooting and security.
Note: Not open to students who have successfully completed COMS B82.
Hours: 54 lecture
Transferable: CSU and private colleges

COMP B41 Web Design: Design Tools
3 units
Recommended: BC placement into reading level 06.
Description: This course is an introductory web design course, focusing on the use of web design tools such as Adobe Dreamweaver and other similar WYSIWYG (What you see is what you get) tools to create web pages from a design perspective. Not open to students who have previously received credit for COMS B74A.
Hours: 54 lecture
Transferable: CSU and private colleges

COMP B42 Web Design: HTML & CSS
3 units
Recommended: BC placement into reading level 06.
Description: This course is an introductory web design course, focusing on the use of web design tools such as Adobe Dreamweaver and other similar WYSIWYG (What you see is what you get) tools to create web pages from a design perspective. Not open to students who have previously received credit for COMS B74B.
Hours: 54 lecture
Transferable: CSU and private colleges.
COMP B43 Web Design: JavaScript
3 units
Prerequisites: Successful completion of COMP B42 or equivalent with a grade of C or better or instructor assessment of student's knowledge/experience with HTML and CSS.
Description: This is an advanced level course in the web design area. Students will build upon previous knowledge of HTML and CSS to create dynamic and interactive web pages using JavaScript. Not open to students who have previously received credit for COMS B74C.
Hours: 54 lecture
Transferable: CSU and private colleges.

COMP B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for Computer Science related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit of paid work experience; 60 hours per semester unit of volunteer work experience. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each unit (75-600).
Transferable: Not transferable.

COMP B72 Applied Software Design
3 units
Prerequisites: Successful completion of COMP B10 and COMP B11 and COMP B21 or equivalent with a grade of C or better or approval of instructor.
Description: The course integrates many aspects of modern end-user computer application design. This includes the SDLC needs assessment, database modeling, SQL, user interface design and the programming that ties these components together. Internal and end-user documentation will also be covered. This course should be taken as the final course for those pursuing the Software Development Certificate of Achievement.
Hours: 54 lecture
Transferable: Not transferable. Pending degree applicability.

COMP B84 CompTIA A+
4 units
Recommended: BC placement into reading level 06.
Description: Designed to cover the information and materials needed to enable students to successfully pass the CompTIA A+ examination. Covers the fundamentals of computer technology, installation and configuration of PCs, laptops and related hardware, and basic networking. Includes hardware and software trouble-shooting using various diagnostic tools and methods employed in industry.
Note: Not open to students who have successfully completed COMS B100.
Hours: 54 lecture, 54 lab
Transferable: Not transferable. Pending degree applicability.

COMP B94 Web Design: PHP & MySQL
3 units
Prerequisites: Successful completion of COMP B42 or equivalent with a grade of C or better or assessment of student's HTML and CSS skills and knowledge by the instructor.
Recommended: BC placement into reading level 06 and writing level 06.
Description: This is an advanced web design course. Building on a foundation of the HTML coding principles and practice, students in this class will learn to develop server-side solutions using PHP and MySQL as a platform. Not open to students who have previously received credit for COMS B75C.
Hours: 54 lecture
Transferable: Not transferable. Pending degree applicability.

CRIM - Criminal Justice Courses

CRIM B1 Introduction to Criminal Justice
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: An overview of the American criminal justice system and its sub-systems; roles and role expectations of criminal justice professionals; theories of crime causation, punishment and rehabilitation; ethics, and multicultural awareness.
Hours: 54 lecture
C-ID: AJ 110/SOCI 160
Transferable: UC, CSU and private colleges; CSU GE D.10; BC GE D.2

CRIM B2 Criminal Law
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Historical development, philosophy of law and constitutional provisions, definitions, classification of crimes and their application to the criminal justice system, legal research, review of case law, methodology and concepts of law as a social force. Explores crimes against persons, property, and the state as a social, religious, and historical ideology.
Hours: 54 lecture
C-ID: AJ 120
Transferable: UC, CSU and private colleges

CRIM B3 Introduction to Evidence
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Origin, development, philosophy and constitutional basis of the law of evidence; constitutional and procedural considerations affecting arrest, search and seizure, kinds of degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies reviewed from a conceptual level.
Hours: 54 lecture
C-ID: AJ 124
Transferable: CSU and private colleges

CRIM B4 Constitutional Criminal Procedure
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Legal processes from pre-arrest, arrest through trial,
CRIM B5 Community Relations
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This course examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. The evolving nature of multiculturalism; Multicultural populations; Managing/Policing diverse populations in correctional settings. Topics may include the consensus and conflicting values in Cultural, Religion, and Law.
Hours: 54 lecture
C-ID: AJ 160
Transferable: UC, CSU and private colleges; CSU GE D.10; BC GE D.2

CRIM B7 Criminal Profiling of Violent Offenders
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Contemporary issues and controversies associated with criminal profiling.
Hours: 54 lecture
C-ID: AJ 160
Transferable: Pending transferability.

CRIM B8 Criminal Investigation
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Fundamentals of criminal investigation; investigator skill requirements; modus operandi determination; the collection, identification and preservation of physical evidence; crime scene investigation; interviews and interrogations; sources of information; surveillance; field note-taking and report writing; courtroom preparation; and the investigation of specific crimes.
Hours: 54 lecture
C-ID: AJ 140
Transferable: CSU and private colleges.

CRIM B9 The Juvenile Justice System
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Techniques of handling juvenile offenders and victims; prevention and suppression of delinquency; diagnosis and referral; organization of community resources; juvenile law and juvenile court procedures.
Hours: 54 lecture
C-ID: AJ 220
Transferable: CSU and private colleges.

CRIM B10 Organized Crime
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Interrelations of organized crime to the community; impact of covert criminal activities upon the social structure; symptoms of organized crime activity, i.e. narcotics and white collar crime; political influences in the legal system; and management of crime control units.
Hours: 54 lecture
Transferable: CSU and private colleges.

CRIM B12 Forensic and Scientific Aspects of Evidence
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: The examination and evaluation of evidence using scientific principles and procedures for use in a legal setting including forensic (autopsy), entomology, anthropology, trace evidence (hair and fiber), fingerprints, serology, ballistics, and DNA. Emphasis on the importance of forensic evidence and science to exonerate the innocent as well as to convict the guilty.
Hours: 54 lecture
C-ID: AJ 150
Transferable: CSU and private colleges.

CRIM B21 Introduction to Correctional Administration
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A survey of the total ‘correctional cycle’ and the relationships of its components. Included are: historical, theoretical and philosophical explanations of criminal behavior; statistics and research findings; employment opportunities; employment requirements.
Hours: 54 lecture
C-ID: AJ 200
Transferable: CSU and private colleges.

CRIM B22 Institutional Treatment and Supervision of Offenders
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A survey of the basic knowledge and skills required of corrections personnel including treatment and supervision of offenders; programs, procedures, legal issues and research in the correctional setting.
Hours: 54 lecture
Transferable: CSU and private colleges.

CRIM B23 Fundamentals of Interviewing and Counseling
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A survey of the basic theories and techniques employed in interviewing and counseling by the correctional worker; traces the development of the meaningful relationship between client and caseworker; explores the various types of counseling employed with a correctional relationship, including group counseling.
Hours: 54 lecture
Transferable: CSU and private colleges.
CRIM B24 Probation, Parole and Community Corrections
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Theory and techniques of probation and parole supervision, including historical development with emphasis on recent programs, research, and development in the field.
Hours: 54 lecture
Transferable: CSU and private colleges.

CRIM B50 Criminal Justice Report Writing
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Emphasizes the practical aspects of gathering, organizing, and preparing written reports for correctional activities on local, state, and federal levels. Covers techniques of communicating facts, information, and ideas effectively in a simple, clear and logical manner for various types of criminal justice system reports, letters, memos.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

CRIM B60 Legal Aspects of Corrections
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A survey of legal issues in the corrections environment, the civil rights of prisoners and responsibilities and liabilities of corrections officials. The historical framework, concepts and precedents that guide correctional practice.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

CRPS - Crop Science Courses

CRPS B1 Principles of Crop Production
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Fundamental practices for field, vegetable, tree, and vine crops; basic botany, classification of plants, soils, seeding, fertilizers, irrigation, pest control, and harvest plus specific practices for crops grown in the San Joaquin Valley. Students who have previously successfully completed the course may repeat when needed for State mandated pest control license. Students must obtain a special override from the Office of Admissions and Records in the Administration building. Field trips required.
Hours: 36 lecture, 54 lab
Transferable: UC, CSU and private colleges; IGETC 5B, 5C; CSU GE B.2, B.3; BC GE B.1

CRPS B2 Forage Crops
3 units
Description: Study of important forage crops of California and the nation; species, varieties, adaptations, production methods, feeding qualities, and processing.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

CRPS B3 Integrated Pest Management
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Fundamental principles of pest control and management in commercial agriculture. Includes pest identification, pestilence diagnosis, and methods of chemical, physical, and biological control. Students who have previously successfully completed the course may repeat when needed for State mandated pest control license. Students must obtain a special override from the Office of Admissions and Records in the Administration building. Field trips required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

CRPS B4 Vegetable Production
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Principles and practices of vegetable crop production. Methods used in seeding, propagation and culture of vegetables and the application of the principles underlying vegetable production techniques.
Hours: 36 lecture, 54 lab
Transferable: UC, CSU and private colleges

CRPS B5 Plant Science
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This course is designed to provide the students with a working knowledge of the fundamental structures and processes of plants. Principles to be applied cover plant structures, physiology, heredity, environmental relationship to growth, adaptation, and management of crops. Techniques of research, exploration of plant growth, and identification of economic crops will be included.
Hours: 36 lecture, 54 lab
C-ID: AG-PS 104
Transferable: UC, CSU and private colleges; IGETC 5B, 5C; CSU GE B.2, B.3; BC GE B.1

CRPS B48WE Occupational Work Experience
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for crop science related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).
Transferable: CSU and private colleges.

DANC - Dance Courses

DANC B6BLB Beginning Ballet (PHED B6BLB)
1 unit
Description: Coeducational beginning ballet course, includes proper warm-up exercise, technical skills and terminology.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E
DANC B6JD Jazz Dance (PHED B6JD)
1 unit
Description: Fundamental Jazz techniques and fundamental terminology of ballet as they relate to jazz dancing; including warm-up exercises for the preparation of the human body as an instrument for dance. Different styles and rhythms of jazz dance and music for jazz dance will be introduced.
Note: Not open to students who have completed PHED B6JD.
Hours: 54 lab
Transferable: UC, CSU, and private colleges. BC GE E

ECON - Economics Courses

ECON B1 Principles of Economics-Micro
3 units
Prerequisites: BC placement into math level 03 or successful completion of MATH B60 or equivalent with a grade of C or better. Recommended: BC placement into reading level 06, writing level 06, and math level 04.
Description: This is an introductory course focusing on choices of individual economic decision-makers. Topics include scarcity, specialization and trade, market equilibrium, elasticity, production and cost theory, market structures, factor markets, and market failure.
Hours: 54 lecture
C-ID: ECON 201
Transferable: UC, CSU and private colleges; IGETC 4.B; CSU GE D.2; BC GE D.2

ECON B2 Principles of Economics-Macro
3 units
Prerequisites: BC placement into math level 03 or successful completion of MATH B60 or equivalent with a grade of C or better. Recommended: BC placement into reading level 06, writing level 06, and math level 04.
Description: An introductory course focusing on aggregate economic analysis. Topics include: market systems, aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics, and economic growth.
Hours: 54 lecture
C-ID: ECON 202
Transferable: UC, CSU and private colleges; IGETC 4.B; CSU GE D.2; BC GE D.2

EDUC - Education Courses

EDUC B24 Early Field Experience for Elementary Teachers
3 units
Recommended: BC placement into reading level 06.
Description: This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. In addition to class time, the course requires a minimum of 45 hours of structured fieldwork in public school elementary classrooms that represent California's diverse student population, and includes cooperation with at least one carefully selected and campus-approved certificated classroom teacher.
Hours: 54 lecture
C-ID: EDUC 200
Transferable: UC, CSU and private colleges

ELET - Electronics Technology Courses

ELET B1 Basic Electronics (DC and AC)
4 units
Prerequisites: Successful completion of ELET B5 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Introduction to electricity and electronics including basic components, electronic circuit calculations, basic electronic test equipment use, electrical measurement, relays and ladder diagrams, alternating current (AC) circuits, and electronic schematic diagrams.
Hours: 54 lecture, 54 lab
Transferable: CSU and private colleges.

ELET B4 Computer Integrated Manufacturing
3 units
Prerequisites: Successful completion of ELET B5 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Introduction to industrial automation technologies and the procedures utilized when troubleshooting automated control systems. Topics include programmable logic controllers (PLC), machine control, industrial robots, barcode readers, material handling systems, and Ethernet communications.
Note: Not open to students who have completed MFGT B4 or MFGT B50.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ELET B5 Programmable Logic Controllers
3 units
Recommended: BC placement into reading level 06.
Description: The function and application of programmable logic controllers. Students will become familiar with the programming of Allen Bradley SLC-500 series controllers with RSLogix software. Topics covered include bit-level input and output instructions, timers, counters, latches, documentation, and troubleshooting.
Note: Not open to students who have taken the equivalent course, MFGT B5.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ELET B6 Analog and Digital Electronics
3 units
Prerequisites: Successful completion of ELET B1 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Applications of analog and digital electronic circuits and systems. Content includes: semiconductor components, analog circuits (power supplies, amplifiers, and oscillators), digital electronic circuits (logic gates, sequential logic circuits), digital signal processing (A/D and D/A conversion).
Note: Not open to students who have taken ELET B9 and ELET B12.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

**ELET B48WE Occupational Work Experience Education**
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for Electronic Technology related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit at paid work experience; 60 hours per semester unit volunteer work experience per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).
Transferable: Not transferable

**ELET B55A Electric Motors - Controls**
4 units
Prerequisites: Successful completion of ELET B1 with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Basic principles, applications, and configuration of direct current and alternating current motors and generators, motor starters, basic motor control circuitry and applications, and an introduction into variable frequency motor drives (VFDs).
Hours: 54 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

**ELET B56 Instrumentation and Process Control**
3 units
Prerequisites: Successful completion of ELET B1 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Basic principles of process instrumentation and control. Topics include: level, pressure, flow, and level measurement, final control elements, piping and instrument diagrams and tags, PID controller programming, and basic control algorithms.
Hours: 36 lecture, 54 lab
Transferable: Not transferable. Degree applicable.

**ELET B58 Advanced Programmable Logic Controllers**
3 units
Prerequisites: Successful completion of ELET B5 with a grade of 'C' or better.
Description: The function and application of programmable logic controllers. Students will become familiar with the programming of Allen Bradley Control Logix series controllers with RSLogix 5000 software, providing all of the basics of using the Rockwell Automation Control Logix platform of PLCs. It will allow students to be involved with either maintenance, or engineering of control systems and machinery with the latest technology from Rockwell Automation. Students will have both theory and lab time, learning how to put a system together, understanding the memory and data structure of the PLC, and writing simple programs. Documenting the written program utilizing the features of the programming software as well as troubleshooting techniques will also be emphasized throughout the course.
Hours: 36 lecture, 54 lab
Transferable: Not transferable. Degree applicable.
EMLS - English for Multilingual Students

EMLS B50 Introduction to College Composition
4 units
Prerequisites: BC placement into writing level 05 or successful completion of EMLS B60 or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need to develop their skills in composition and persuasion as well as comprehension and analysis of reading. Stresses both organization and in-depth essay development as well as critical thinking. Prepares students for ENGL B1A.
Note: Not open to students who have completed ENSL B50 or ENSL B1.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

EMLS B50NC Introduction to College Composition
0 units
Prerequisites: BC placement into writing level 05 or successful completion of EMLS B60 or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need to develop their skills in composition and persuasion as well as comprehension and analysis of reading. Stresses both organization and in-depth essay development as well as critical thinking. Prepares students for ENGL B1A.
Note: Not open to students who have completed ENSL B50, EMLS B50, or ENSL B1.
Hours: 72 lecture
Repeatable: 3
Transferable: Not transferable. Not degree applicable.

EMLS B51 Advanced Reading
3 units
Prerequisites: BC placement into reading level 05 or successful completion of EMLS B61 or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need to improve reading comprehension and build vocabulary in English. Emphasis is on identifying main ideas, summarizing, inferring, analyzing, drawing comparisons, and developing more advanced vocabulary by reading complex academic and literary texts. Prepares students for college level reading.
Note: Not open to students who have completed ENSL B52.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

EMLS B52 Advanced Communication Skills
3 units
Prerequisites: BC placement into reading level 05 or successful completion of EMLS B62 or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need prescriptive training in pronunciation, stress and intonation in spontaneous speech. Development of oral communication skills through formal presentations and debates. Analysis of lectures, arguments, and academic discussions.
Note: Not open to students who have completed ENSL B22.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

EMLS B52NC Advanced Communication Skills
0 units
Prerequisites: BC placement into reading level 05 or successful completion of EMLS B62 or EMLS B62NC or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need prescriptive training in pronunciation, stress and intonation in spontaneous speech. Development of oral communication skills through formal presentations and debates. Analysis of lectures, arguments, and academic discussions.
Note: Not open to students who have completed ENSL B22 or EMLS B52.
Hours: 54 lecture
Repeatable: 3
Transferable: Not transferable. Not degree applicable.

EMLS B60 Basic Skills Writing
4 units
Prerequisites: BC placement into writing level 04 or successful completion of EMLS B70 or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students at the advanced level of English who require grammar and composition skills necessary to take essay exams, improve personal and professional writing, or prepare for EMLS B50 or ENGL B50.
Note: Not open to students who have completed ENSL B60.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

EMLS B61 Intermediate Reading
4 units
Prerequisites: BC placement into reading level 04 or successful completion of EMLS B71 or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need to improve reading comprehension and build vocabulary in English. Emphasis is on identifying main ideas, summarizing, making inferences, and developing vocabulary, using more complex academic reading selections than in EMLS B71.
Note: Not open to students who have completed ENSL B51 or ACDV B61 or ACDV B62.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

EMLS B61NC Intermediate Reading
0 units
Prerequisites: BC placement into reading level 04 or successful completion of EMLS B71 or ENSL B61 or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need to improve reading comprehension and build vocabulary in English. Emphasis is on identifying main ideas, summarizing, making inferences, and developing vocabulary, using more complex academic reading selections than in EMLS B71.
Note: Not open to students who have completed ENSL B51 or EMLS B61.
Hours: 72 lecture
Repeatable: 3
Transferable: Not transferable. Not degree applicable.

EMLS B62 Intermediate Communication Skills
3 units
Prerequisites: BC placement into reading level 04 or successful completion of EMLS B72 or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need communication and pronunciation skills.
Emphasis is on critical listening skills, oral presentations, class discussions, and pronunciation practice.
Note: Not open to students who have completed ENSL B21.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

EMLS B62NC Intermediate Communication Skills
0 units
Prerequisites: BC placement into reading level 04 or successful completion of EMLS B72 or ENSL B71CD or equivalent with a grade of C or better.
Description: Recommended for international and multilingual students who need communication and pronunciation skills.
Emphasis is on critical listening skills, oral presentations, class discussions, and pronunciation practice. Note: Not open to students who have completed ENSL B21 or EMLS B62.
Hours: 54 lecture
Repeatable: 3
Transferable: Not transferable. Not degree applicable.

EMLS B70 Grammar and Composition
4 units
Prerequisites: BC placement into writing level 03.
Description: Recommended for international and multilingual students at the high-intermediate level of English who require grammar and composition skills necessary to take essay exams, improve personal written communication, or prepare for EMLS B60.
Note: Not open to students who have completed ENSL B70 or ENSL B3.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

EMLS B70NC Grammar and Composition
0 units
Prerequisites: BC placement into writing level 03.
Recommended for multilingual students at the high-intermediate level of English who require grammar and composition skills necessary to take essay exams, improve personal written communication, or prepare for EMLS B60.
Note: Not open to students who have completed ENSL B70, EMLS B70, or ENSL B3.
Hours: 72 lecture
Repeatable: 3
Transferable: Not transferable. Not degree applicable.

EMLS B71 Basic Reading
4 units
Prerequisites: BC placement into writing level 03.
Description: Recommended for international and multilingual students who need to improve reading comprehension and build their vocabulary in English. Emphasis is on identifying main ideas, summarizing, making inferences, developing vocabulary, and using academic language. Note: Not open to students who have completed ENSL B61.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

EMTC - Emergency Medical Technician Courses

EMTC B10 Paramedic 1
6 units
Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program.
Corequisite: EMTC B11
Description: This course introduces the student to the roles and responsibilities of the Paramedic within the Emergency Medical System. The student will be expected to apply basic concepts of anatomy, pathophysiology, pharmacology, patient assessment, the health and safety of the paramedic, documentation, and medical legal issues to be able to formulate a ‘field impression’ of patient status.
Hours: 108 lecture
Transferable: CSU and private colleges.

EMTC B11 Paramedic Skills Lab 1
1 unit
Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program and possess a high school diploma or general education equivalent and possess a current EMT certificate or NREMT-Basic registration or possess a current AEMT
EMTC B13 Paramedic 3
6 units
Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program and successful completion of EMTC B10, EMTC B11, and EMTC B12 with a minimum GPA of 80%.
Corequisite: EMTC B14
Description: This course builds upon previous paramedic content and introduces the basic concepts of gastroenterology, genitourinary, hematology, non-traumatic musculoskeletal conditions, toxicology, psychology, medical ailments of the head, eyes, ears, nose, and throat, pulmonology, endocrinology immunology, neurology, and communicable diseases.
Hours: 108 lecture
Transferable: CSU and private colleges.

EMTC B14 Paramedic Skills Lab 2
1 unit
Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program.
Corequisite: EMTC B13
Description: The focus of this course is to build upon the knowledge gained in the first semester paramedic classes and to prepare the student for real hands-on experience in the clinical setting. This course tests for competency in patient assessment, medication administration, airway management, cardiology, medical emergencies and traumas. The topics taught in this course will be coordinated to align with the weekly lessons taught during lecture in order to meet the performance objectives of the program.
Hours: 54 lab
Transferable: CSU and private colleges.

EMTC B15 Paramedic 4
6 units
Prerequisites: Limitation on enrollment, acceptance into the Paramedic Program.
Corequisite: EMTC B14
Description: This course builds upon the content from the first semester paramedic courses and introduces the basic concepts of shock, traumas/burns, environmental emergencies, geriatrics, abuse, home health/special needs, ambulance operations, and weapons of mass destruction, Hazmat, bio terrorism, and the incident command system.
Hours: 108 lecture
Transferable: CSU and private colleges.

EMTC B16 Paramedic Clinical Lab
3.5 units
Prerequisites: Limitation on enrollment: acceptance into the Paramedic Program and EMTC B15 successful completion (within 6 months) of paramedic didactic courses with an 80% or higher GPA.
Description: This course involves clinical experience in the hospital setting enabling the paramedic student to utilize theory and practice learned during the didactic phase. The clinical rotation puts an emphasis on patient assessments and utilization of paramedic skills in the hospital setting under the direct supervision of an RN and/or MD as the clinical preceptor.
Materials Fee: $24.00
Hours: 189 lab
Transferable: CSU and private colleges.

EMTC B17 Paramedic Field Internship
10 units
Prerequisite: Limitation on Enrollment, Acceptance into the Paramedic Program. Successful completion of EMTC B16 with a grade of C or better and successful completion (within 3 months) of EMTC B30 with an 80% or higher GPA.
Description: This is the final course of the paramedic program. Field training is performed in a 911 system on an advanced life support ambulance under the direct supervision of a qualified paramedic preceptor. Field training continues the refinement of learned skills. It also advances student understanding by introducing them to a wide variety of prehospital emergencies in the form of on the job training.
Materials Fee: $24.00
Hours: 540 lab
Transferable: CSU and private colleges.

EMTC B50 Emergency Medical Technician-1
8 units
Prerequisites: Prerequisites: Limitation on Enrollment, Student must be 18 years of age by the completion date of the course. Mandatory physical examination/immunizations and fit testing must be completed 2 weeks after the start of the course. Costs of meeting health requirements are paid by the student. Failure to meet these requirements will result in student ineligibility for clinical rotations. Students must have a copy of a current BLS (American Heart Association Health Care Provider) card. Recommended: Successful completion of MEDS B60 with a grade of ‘C’ or better.
Description: Provides foundational skills and assessment techniques to care for an ill or injured person in the pre-hospital setting. Closely follows state regulations for EMT-1 training and leads to certification at the local, county, and state level. Required for all ambulance personnel and appropriate for...
many other first responders such as law enforcement and fire personnel. The student must meet health requirements to participate in the lab section of the course. Any expenses involved in meeting the health requirements are the student’s expense. Mandatory physical examination/immunizations will be required within 2 weeks of the beginning of the course and are at the student’s expense. Failure to meet these requirements will result in student ineligibility for clinical objectives.

Materials Fee: $24.00
Hours: 135 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

**EMTC B50R Emergency Medical Technician I Recertification Preparation**
1 unit
Prerequisites: Must possess current EMT-1 certification or certification that has expired in less than one year.
Description: A review of material in EMTC B50 with updates on EMT-1 issues and new material or skill techniques. An approved refresher course that follows state regulations and leads to a recertification completion certificate. Required to continue practice of pre-hospital emergency care.
Materials Fee: $24.00
Hours: 24 lecture
Repeat: Legally Mandated Training
Transferable: Not transferable. Degree applicable.

**EMTC B51 Emergency Medical Responder**
3 units
Description: This course is designed to train fire service personnel to render pre-hospital basic life support care under field emergency conditions. The CDCR FIRE EMR course complies with the National EMS Education standards for Emergency Medical Responder. This course has been approved by the California EMS Authority.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

## ENGL - English Courses

### ENGL B1A Expository Composition
3 units
Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or ENGL B53 or equivalent with a grade of C or better.
Description: Critical reading, writing, and thinking. Students will critically read and write primarily expository and argumentative texts that respond to a variety of rhetorical situations and contexts and incorporate college-level research. Minimum 6,000 words formal writing.
Hours: 54 lecture
C-ID: ENGL 100
Transferable: UC, CSU and private colleges; IGETC 1.A; CSU GE A.2; BC GE A.2

### ENGL B1B Introduction to Types of Literature
3 units
Prerequisites: Successful completion of ENGL B1A or equivalent with a grade of C or better.
Description: Introductory course in literature, comprising critical analysis of notable works in prose fiction, drama, and poetry, with emphasis on evaluating the logical relationship between form and content and on formulating criteria for artistic judgment. Continued instruction in the communication skills of writing, listening, and discussing.
Hours: 54 lecture
C-ID: ENGL 120
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE A.3; CSU GE C.2; BC GE C.2

**ENGL B2 Advanced Composition and Critical Thinking**
4 units
Prerequisites: Successful completion of ENGL B1A or equivalent with a grade of C or better.
Description: An interdisciplinary team-taught course. Expository writing, reading of expository and literary works; study of the most important ideas in great works in disciplines such as philosophy, natural science, literature, and the social and behavioral sciences; survey of methods of critical thinking and advanced composition.
Hours: 72 lecture
C-ID: ENGL 105
Transferable: UC, CSU and private colleges; IGETC 1.B; CSU GE A.3; BC GE A.2

**ENGL B3 Argumentative Writing and Critical Thinking Through Literature**
4 units
Prerequisites: Successful completion of ENGL B1A with a grade of C or better.
Description: This course offers instruction in argumentative, critical, and analytical writing, critical thinking, research strategies, information literacy, and proper documentation through the study of literary works from major genres, while developing students’ close reading skills and promoting an appreciation for the aesthetic qualities of literature.
Hours: 72
C-ID: ENGL 110
Transferable: UC, CSU and private colleges; IGETC 1.B; CSU GE A.3; BC GE A.2

**ENGL BSA Survey of English Literature**
3 units
Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1B with a grade of C or better.
Description: A historical survey of English literature, emphasizing critical reading of representative works from Beowulf through the eighteenth century. Recommended for students whose major or minor is English and for students who desire to extend their knowledge of the literary tradition.
Hours: 54 lecture
C-ID: ENGL 160
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

**ENGL BSB Survey of English Literature**
3 units
Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.
Description: A historical survey of English literature, emphasizing critical reading of representative works from eighteenth century through the twenty-first century. Recommended for students whose major or minor is English and for students who desire to
ENGL B25B Survey of World Literature
3 units
Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.
Description: A study of representative works of world literature in historical and cultural contexts, focusing on their aesthetic significance and the enduring human values which unite the different literary traditions. Covers approximately 1650 to present. Not open to students who have completed ENGL B20B.
Hours: 54 lecture
Transferable: Pending transferability.

ENGL B27 The Bible as Literature
3 units
Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.
Description: Interpretation and analysis of Old and New Testament genres: Narrative, poetry, drama, epistles, didactics, wisdom, and prophecy.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

ENGL B28 Classical Mythology
3 units
Prerequisites: BC placement into writing level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.
Description: A study of classical myth, saga, and local legend, primarily Greek and Roman. Relates classical myths to historical and modern culture.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

ENGL B30A Survey of American Literature
3 units
Prerequisites: BC placement into level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.
Description: Study of the most notable American authors from the colonial period to the American Civil War with emphasis on the intrinsic value of the literature.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

ENGL B30B Survey of American Literature
3 units
Prerequisites: BC placement into level 06 or successful completion of ENGL B50 or equivalent with a grade of C or better. Recommended: Successful completion of ENGL B1A with a grade of C or better.
Description: Study of the most notable American authors from the second half of the 19th century to the present with emphasis on the intrinsic value of the literature.
Hours: 54 lecture
ENGL B100 Technical Writing
3 units
Prerequisites: Admissions to the Bachelor of Science, Industrial Automation Program
Description: Study of the process of technical writing and written communication. Students review various formats and writing purposes and produce technical and business-related documents.
Hours: 54 lecture
Transferable: Bachelor's Degree Applicable

ENGR - Engineering Courses

ENGR B17 Introduction to Electrical Circuits
3 units
Prerequisites: Successful completion of PHYS B4B or equivalent with a grade of C or better.
Corequisite: Math B6D with a grade of 'C' or better, or may be taken concurrently.
Description: Principles and techniques of D.C. and A.C. circuit analysis, including Kirchhoff's laws, mesh and nodal analysis, Thevenin's and Norton's theorems, impedance, phasors, frequency response, power calculations, natural and forced responses, analog building blocks, operational amplifiers, and Laplace transforms.
Hours: 54 lecture
Transferable: UC, CSU and private colleges

ENGR B17L Electric Circuit Lab
1 unit
Prerequisites: Successful completion of ENGR B17 or equivalent with a grade of C or better or may be taken concurrently.
Description: An introduction to the construction and measurement of electrical circuits. Basic use of electrical test and measurement instruments including multimeters, oscilloscopes, power supplies, and function generators. Use of circuit simulation software. Interpretation of measured and simulated data based on principles of circuit analysis for DC, transient, and sinusoidal steady-state (AC) conditions. Elementary circuit design. Practical considerations such as component value tolerance and non-ideal aspects of lab instruments. Construction and measurement of basic operational amplifier circuits.
Hours: 54 lab
Transferable: UC, CSU and private colleges

ENGR B19C Introduction to Programming Concepts and Methodologies for Engineers
3 units
Prerequisites: Successful completion of MATH B1B or equivalent with a grade of C or better.
Description: The purpose of this course is expose students to (1) the fundamental concepts of procedure oriented programming, (2) associated abstraction mechanisms and design processes, (3) the interface of software with the physical world (e.g., the use of sensors), and (4) the application of programming concepts to numerical analysis techniques. This course utilizes the C/C++ programming language.
Hours: 36 lecture, 54 lab
ENGR B20 Programming and Problem-Solving in MATLAB  
3 units  
Prerequisites: Successful completion of MATH B6A with a grade of C or better.  
Description: This course utilizes the MATLAB environment to introduce students to problem-solving methods relevant to science and engineering. It provides an introduction to computer-aided design (CAD). Topics include development of visualization skills; orthographic projections; properties of forces, moments, couples, and resultants; two- and three-dimensional force systems acting on engineering structures in equilibrium; analysis of trusses, beams, and distributed forces; shear and bending moment diagrams; center of gravity, centroids, friction, and area and mass moments of inertia.  
Hours: 36 lecture, 54 lab  
Transferable: CSU transferable, Associate Degree.

ENGR B24 Engineering Graphics and Descriptive Geometry  
3 units  
Prerequisites: Successful completion of MATH B1B with a grade of C or better.  
Description: This course covers the principles of engineering drawings in visually communicating engineering designs and an introduction to computer-aided design (CAD). Topics include development of visualization skills; orthographic projections; mechanical dimensioning and tolerancing practices; and the engineering design process. Assignments develop sketching and 2-D and 3-D CAD skills. The use of CAD software is an integral part of the course.  
Hours: 36 lecture, 54 lab  
Transferable: UC, CSU and private colleges

ENGR B36 Engineering Mechanics-Statics  
3 units  
Prerequisites: Successful completion of MATH B6B and PHYS B4A or equivalent with a grade of C or better.  
Description: A first course in engineering mechanics: properties of forces, moments, couples and resultants; two- and three-dimensional force systems acting on engineering structures in equilibrium; analysis of trusses, beams, and distributed forces; shear and bending moment diagrams; center of gravity, centroids, friction, and area and mass moments of inertia.  
Hours: 54 lecture  
Transferable: UC, CSU and private colleges

ENGR B37 Engineering Mechanics-Dynamics  
3 units  
Prerequisites: Successful completion of ENGR B36 or equivalent with a grade of C or better.  
Description: Fundamental principles of motions of particles and rigid bodies and their application to engineering problems. Velocity, acceleration, relative motion, work, energy, impulse and momentum. Mathematical modeling and analysis of mechanical systems.  
Hours: 54 lecture  
C-ID: ENGR 230  
Transferable: UC, CSU and private colleges

ENGR B40 Surveying  
3 units  
Prerequisites: Successful completion of MATH B1B or equivalent with a grade of C or better.  
Description: The course applies theory and principles of plane surveying: office computations and design; operation of surveying field equipment; and production of engineering plans/maps. Topics include distances, angles, and directions; differential leveling; traversing; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; land description techniques; and GPS. Extensive field work using tapes, levels, transits, theodolites, total stations, and GPS.  
Hours: 36 lecture, 54 lab  
Transferable: UC, CSU and private colleges

ENGR B45 Properties of Materials  
4 units  
Prerequisites: Successful completion of CHEM B1A and PHYS B4A or equivalent with a grade of C or better.  
Description: Internal structure of engineering materials. Characteristics of single and multiple phase metals; polymers, ceramics and composite materials. Mechanical, thermal, chemical and electrical behavior of engineering materials. Lab investigation of the physical properties of metals, wood, soils, concrete, and polymers.  
Hours: 54 lecture, 54 lab  
Transferable: UC, CSU and private colleges

ENGR B47 Introduction to Engineering and Design  
2 units  
Prerequisites: Successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.  
Description: Introduction to the engineering profession and the engineering design process. Explores the branches of engineering, the functions of an engineer, and the industries in which engineers work. Explains the engineering education pathways and explores the effective strategies for students to reach their full academic potential. Presents an introduction to the methods and tools of engineering problem solving and design including the interface of the engineer with society and engineering ethics. Develops communication skills pertinent to the engineering profession.  
C-ID: ENGR 110  
Hours: 18 lecture, 54 lab  
Transferable: UC, CSU and private colleges

ERSC - Earth Science Courses

ERSC B10 Introduction to Earth Science  
3 units  
Prerequisites: BC placement into reading level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.  
Description: Introduction to the fundamentals of Earth Science, including the solid Earth, atmosphere, hydrosphere, and Earth's place in the universe. Investigations include interactions between Earth's systems including the rock cycle, plate tectonic cycle, weathering cycle, hydrologic cycle, and global climate. Two Saturday field trips are optional.  
Hours: 54 lecture  
C-ID: GEOL 120  
Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

ERSC B10L Earth Science Lab  
1 unit  
Prerequisites: Successful completion of ERSC B10 or equivalent with a grade of C or better or may be taken concurrently.  
Description: Earth Science lab exercises are designed to enhance lecture topics from Earth Science 10. Lab work will include the
identification of rocks and minerals, the rock cycle, weather systems and the effect of weather on landforms, ocean systems and the solar system.

Note: This lab course can be taken subsequent to or concurrently with the lecture, ERSC B10.

Hours: 54 lab
C-ID: GEOL 120L
Transferable: UC, CSU and private colleges; IGETC 5.C; CSU GE B.3; BC GE B.1

FDSV - Food Service Courses

FDSV B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student’s qualifications and objectives.
Description: College credit for food service related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).
Transferable: CSU and private colleges.

FDSV B50 Introduction to the Foodservice Industry
2 units
Recommended: BC placement into reading level 06.
Description: An introduction to the foodservice industry including history, trends, organization and job opportunities. Entry skills to be taught include communication techniques, terminology, work simplification, application of computational skills, safety procedures, time management, equipment identification and operation, and knife skills and cutting techniques. Provides career and educational planning. Satisfies the 0.5 unit counseling requirement for graduation from Bakersfield College. Field trips may be required.
Hours: 36 lecture
Transferable: Not transferable. Degree applicable.

FDSV B51 Food and Nutrition Orientation
0.5 unit
Recommended: BC placement into reading level 06.
Description: Provides a basic understanding of professional standards used in food service industry as well as orientation to the kitchen equipment, storage practices and the use of a recipe. Covers skills development for organizational skills, time management and goal setting. Preparations for the construction of student projects and portfolios are included in this course.
Hours: 9 lecture
Transferable: Not transferable. Degree applicable.

FDSV B52 Foodservice Sanitation and Safety
2 units
Recommended: BC placement into reading level 06.
Description: Basic principles of sanitation and safety standards set by regulatory agencies. Causes and prevention of food-borne illnesses. Application of food safety production and service, personal hygiene and facilities maintenance procedures. Food safety regulations and inspection including HACCP system are emphasized. Course meets minimum food safety certification requirements of California legislation effective January 1, 2000. Upon passing the required exam, course certificate of completion is awarded from the Education Foundation of the National Restaurant Association. Field trips may be required.
Hours: 36 lecture
Transferable: Not transferable. Degree applicable.

FDSV B55A Food Service Production Theory I
2 units
Description: Basic principles and techniques involved in commercial and non-commercial food production. Emphasizes recipe standardization, equipment and sanitation and safety principles. Cookery principles relating to stocks, sauces, soups, meats, vegetables, salads, potatoes, and starches. Field trips may be required.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FDSV B55B Food Service Production Theory II
2.5 units
Description: Basic principles and techniques involved in commercial and non-commercial food production. Emphasizes nutritional standards, equipment use and sanitation/safety principles. Cookery principles relating to poultry, fish and shellfish, sandwiches, hors d’oeuvres, breakfast cookery, vegetarian cookery, food presentation and garde manger. Field trips may be required.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FDSV B55C Food Service Production Lab I
2 units
Prerequisites: Successful completion of FDSV B50 and FDSV B55A or FDSV B55B may be taken concurrently with a grade of C or better.
Description: Practical experiences in the preparation of foods typical to a dinner house/a la carte menu in the campus restaurant. Work station rotations in kitchen and dining room with emphasis on professional skill development, work ethics and presentation skills for plate service. Uniforms are required. Field trips may be required.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FDSV B55D Food Service Production Lab II
2 units
Prerequisites: Successful completion of FDSV B50 and FDSV B55A or FDSV B55B may be taken concurrently with grades of C or better.
Description: Practical experiences in the preparation of buffets or FDSV B55B may be taken concurrently with grades of C or better.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FDSV B55E Food Service Production Lab III
2 units
Prerequisites: Successful completion of FDSV B50 and FDSV B55A or FDSV B55B may be taken concurrently with grades of C or better.
Description: Practical experiences in the preparation of buffets and garde manger in the campus restaurant. Work station rotations in the kitchen and dining room with emphasis on professional skill development, work ethics and presentation skills for buffet service. Uniforms are required. Field trips may be required.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FDSV B55F Food Service Production Lab IV
2 units
Prerequisites: Successful completion of FDSV B50 and FDSV B55A or FDSV B55B may be taken concurrently with grades of C or better.
Description: Practical experiences in the preparation of buffets and garde manger in the campus restaurant. Work station rotations in the kitchen and dining room with emphasis on professional skill development, work ethics and presentation skills for buffet service. Uniforms are required. Field trips may be required.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.
FIRE - Fire Technology Courses

FIRE B1 Fire Protection Organization
3 units
Description: Career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations offering the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics. Field trips required.
Hours: 54 lecture
Transferable: CSU and private colleges.

FIRE B2 Principles of Fire and Emergency Services Safety and Survival
3 units
Description: This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.
Hours: 54 lecture
Transferable: CSU and private colleges. Degree applicable.

FIRE B3 Fire Command, Strategy, & Tactics
3 units
Description: This course will cover fire department organization, management, resources, and the use of those resources to control various types of emergencies. The course will also cover the incident command system, tactics, and strategies. This course also provides an introduction to the national incident management system.
Hours: 54 lecture
Transferable: CSU and private colleges. Degree applicable.

FIRE B4 Fire Behavior and Combustion
3 units
Description: Theory and fundamentals of how and why fires start, spread and are controlled; an in-depth study of fire chemistry and physics; fire burning characteristics of materials, extinguishing agents, and fire control techniques.
Hours: 54 lecture
Transferable: CSU and private colleges. Degree applicable.

FIRE B5 Fire Prevention
3 units
Description: Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention systems, fire investigation and fire safety education.
Hours: 54 lecture
Transferable: CSU and private colleges. Degree applicable.

FIRE B6 Fire Protection Equipment and Systems
3 units
Description: This course provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable
Transferable: CSU and private colleges. Degree applicable.

FIRE B7 Building Construction for Fire Protection
3 units
Description: The study of the components of building construction that relate to fire/life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires/collapse emergencies. The development and evolution of building and fire codes will be studied in relationship to past fires/collapses in residential, commercial, and industrial occupancies.
Hours: 54 lecture
Transferable: CSU and private colleges. Degree applicable.

FIRE B25A Wildland Fire Behavior
3 units
Description: Provides the knowledge to understand wildland fire behavior at the supervisory level in the Incident Command System. Conforms to curriculum requirements of the National Wildfire Coordinating Group. Includes, but is not limited to, the material contained in S-290 Intermediate Fire Behavior.
Hours: 54 lecture
Transferable: CSU and private colleges.

FIRE B25B Wildland Firefighter Safety and Survival
3 units
Description: Study of factors that lead to unsafe working conditions in wildland firefighting and procedures to limit risk. Emphasis is placed on avoiding situations and conditions which have resulted in the fire shelter deployments, injuries, and fatalities. The Ten Standard Fire Orders and the Eighteen Situations that Shout Watch Out are studied in detail. Course meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments.
Hours: 54 lecture
Transferable: CSU and private colleges.

FIRE B25C Wildland Fire Operations
3 units
Description: Presents the command structure and operational process of ground and air operations in the control of wildland fires. Fixed wing aircraft and helicopters are discussed. Includes interagency relationships, mobilization, trainee assignments, and the incident assignment kit. Course meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments.
Hours: 54 lecture
Transferable: CSU and private colleges.

FIRE B25D Wildland Public Information Officer, Prevention, and Investigation
3 units
Description: Presents the information necessary to understand the roles and functions of the Wildland Fire Information Officer, Wildland Fire Prevention Officer, and Wildland Fire Investigation Officer.
Hours: 54 lecture
Transferable: CSU and private colleges.

FIRE B25E Wildland Fire Logistics, Finance, and Planning
3 units
Description: Explains the roles, responsibilities, and functions of the planning, logistics, and finance sections that are utilized during the control of wildland fires. Meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments.
Hours: 54 lecture
Transferable: CSU and private colleges.

FIRE B26A S-200 Initial Attack Incident Commander (ICT 4)
1 unit
Description: Prepares the student to function as an initial attack incident commander at the ICT4 level in the incident Command System. Includes preparation, mobilization, size up, leading the initial attack, and initial attack strategy. Meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments.
Hours: 18 lecture
Transferable: CSU and private colleges.

FIRE B26D Interagency Incident Business Management S-260
1 unit
Description: Provides knowledge to perform the tasks of the position in the Incident Command System (ICS) for which basic incident business management is required. Provides policy and direction for incident business management. Intended for students to pursue a career with a wildland fire suppression agency or for a specialty with a municipal fire control agency.
Hours: 18 lecture
Transferable: CSU and private colleges.

FIRE B26E S-215 Fire Operations in the Wildland/Urb ans Interface
1.5 units
Description: Designed to meet the training needs for incident commanders (Type 4), strike team leaders, and company officers confronting wildland fire that threatens life, property, and improvements in the wildland urban interface. Course meets National Wildfire Coordinating Group curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments.
Hours: 27 lecture
Transferable: CSU and private colleges.

FIRE B26G S-230 Crew Boss Single Resource
1.5 units
Description: This is a classroom course designed to produce student proficiency in the performance of duties associated with the single resource boss position from initial dispatch through demobilization to the home unit. Topics include operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization, and post-incident responsibilities.
Hours: 27 lecture
Transferable: CSU and private colleges.

FIRE B26K S-244 Field Observer
1.5 units
Description: This course provides the student with the skills necessary to perform as a field observer (FOBS) and/or a fire
effects of the FOBS and FEMO; how to make observations and document those observations; how to produce hand drawn and GPS field maps; and how to navigate using a compass and GPS. The navigation unit has field exercises, and the final field exercise will total 8 hours. Meets National Wildfire Coordinating Group/California State Fire Marshal curriculum criteria. Prepares students for employment with wildland fire management agencies and municipal fire departments. Offered: As a National Wildfire Coordinating Group/State Fire Marshal CFSTES class. Hours: 27 lecture Transferable: CSU and private colleges.

**FIRE B26M Display Processor**
1 unit
Description: This course provides students with the skills necessary to perform as a display processor (DPRO). Topics include general roles and responsibilities and how to assist the situation unit leader with producing incident maps, inputs for the Incident Status Summary (ICS-209) and other incident products. Pre-course work, students need to read specific chapters in Basic Land Navigation (NFES 2865). This class is a National Wildfire Coordinating Group/State Fire Marshal CFSTES class.
Hours: 18 lecture Transferable: CSU and private colleges.

**FIRE B27B 1-300 Incident Command System**
1.5 units
Description: Provides description and detail of the organization and operation of the ICS. Covers management of resources, duties of all positions including the Air Operations organization, and example of how the essential principles are used in incident and event planning. Meets the curriculum requirements of the National Wildfire Coordinating Group. Applicable to wildland fire management agencies and municipal fire departments. Offered as a National Wildfire Coordinating Group/State Fire Marshal CFSTES class.
Hours: 27 lecture Transferable: CSU and private colleges.

**FIRE B28B L-280 Followership to Leadership**
1 unit
Description: This training course is designed as a self-assessment opportunity for individuals preparing to step into a leadership role. The course combines classroom and lab (in the field) instruction, with students working through a series of problem solving events in small teams (Field Leadership Assessment Course).
Hours: 20 lecture Transferable: CSU and private colleges.

**FIRE B29 S-212 Wildland Fire Chain Saws**
2 units
Description: Prepares students to become a wildfire powersaw operator within the National Interagency Management System. Covers safety considerations, techniques of saw operation, maintenance, and repair. Wildland Fire Chain Saws (S-212) is identified training in the National Wildfire Coordinating Group Suppression/California State Fire Marshal Curriculum. Intended for students to pursue a career with a federal or state wildland fire management agency or as specialty training with a municipal/county fire agency.
Hours: 36 lecture Transferable: CSU and private colleges.

**FIRE B30 RT130 Wildland Skill Refresher**
2 units
Description: Annual fireline Safety Refresher Training is designed to provide up-to-date fireline safety information to anyone who will be working on the fireline. The RT130 class was developed to recognize hazards, mitigate risk, maintain safe practices, and reduce accidents and near misses on the fire ground.
Hours: 9 lecture, 81 lab
Repeat: unlimited, legally mandated training Transferable: Not transferable. Not degree applicable.

**FIRE B51F Fire Investigation 1A**
2 units
Description: This course provides the participants with an introduction and basic overview of fire scene investigation. The focus of the course is to provide information on fire scene indicators and to determine the fire’s origin. Arson investigators will successfully carry out their responsibilities in arson detection and explosives investigation. Emphasizes essential elements of fire and explosives behaviors, types and use of lab services, and investigative responsibilities of an investigator at location of arson and explosives incidents. Meets P.O.S.T. certification requirements. Offered as a State Fire Marshal CFSTES class.
Hours: 40 lecture Transferable: Not transferable. Not degree applicable.

**FIRE B51G Training Instructor 1A**
2 units
Description: This is the first of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two student teaching demonstrations are required of each student.
Hours: 40 lecture Transferable: Not transferable. Not degree applicable.

**FIRE B51H Training Instructor 1B**
2 units
Description: This is the second of a three-course series. Topics include methods/techniques for training with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two student teaching demonstrations are required of each student.
Hours: 40 lecture Transferable: Not transferable. Not degree applicable.

**FIRE B51J Fire Investigation 1B**
2 units
Description: Topics of discussion include the juvenile fire setter, report writing, evidence collection and preservation procedures. Course meets P.O.S.T. certification requirements.
Hours: 40 lecture Transferable: Not transferable. Not degree applicable.
FIRE B51K Fire Command 1C
2 units
Description: This course is designed around the responsibilities of the Company Officer at a wildland/urban interface incident. It will bring the structural Company Officer out of the city and into the urban/interface, in other words, from his or her comfort zone into an area that could very well be quite unfamiliar for Fire Service Officers.
Hours: 32 lecture, 8 lab
Transferable: Not transferable. Degree applicable.

FIRE B51L Fire Apparatus Driver Operator 1A
2 units
Prerequisite: FIRE B62 or FIRE B63 with a grade of ‘C’ or better and a California Class B driver’s license, fire fighter restricted.
Description: This course provides the student with information on driver responsibilities, recognized standards, and related laws for fire apparatus reflecting current California Vehicle Code requirements and the 2009 NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. Topics include basic inspections, documentation, maintenance, and troubleshooting fire apparatus, and techniques on driving and positioning fire apparatus. Each student also has the opportunity to increase his or her driving skills during simulated driving conditions.
Hours: 24 lecture, 16 lab
Transferable: Degree applicable.

FIRE B51M Fire Apparatus Driver/Operation 1-B
2 units
Prerequisite: California driver’s license, Class A, B or C, with a fire fighter endorsement.
Description: This course was developed to reflect the 2009 NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. This course provides the student with information on pump construction and theory of pump operations. Topics include methods for performing basic hydraulics and techniques on basic inspections, documentation, maintenance, and troubleshooting fire pumps. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions.
Hours: 24 lecture, 16 lab
Transferable: Not transferable. Not degree applicable.

FIRE B52A Company Officer 2A
2.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides information on general administrative functions, the implementation of department policies and procedures, and addresses conveying the fire department’s role, image, and mission to the public.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52B Company Officer 2B
1.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause, securing the incident scene and preserving evidence.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52C Company Officer 2C
2.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause, securing the incident scene and preserving evidence.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52D Company Officer 2D
2.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides information on conducting incident size-up, developing and implementing an initial plan of action involving single and multi-unit operations for various types of emergency incidents to mitigate the situation following agency safety procedures, conducting pre-incident planning, and develop and conduct a post-incident analysis.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52E Company Officer 2E
2.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides information on developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program.
Hours: 27 lecture
CCS: Credit Course
Transferable: Not transferable. Degree applicable.

FIRE B52F Chief Fire Officer 3A
1.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of a Chief Fire Officer including developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program.
Hours: 27 lecture
CCS: Credit Course
Transferable: Not transferable. Degree applicable.

FIRE B52G Chief Fire Officer 3B
1 unit
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides students with a basic knowledge of the budgeting requirements related to the roles
and responsibilities of a Chief Fire Officer including developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding.

Hours: 18 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52H Chief Fire Officer 3C
1.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides students with a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer including directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the AHJ.
Hours: 27 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52I Chief Fire Officer 3D
1.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides students with a basic knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer including developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records.
Hours: 27 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52J Executive Chief Fire Officer 4A
2 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are recruitment, selection, and placement of human resources; the development of a positive and participative member/management program; the establishment and evaluation of a list of education and in-service training goals; appraisal of a member assistance program; and the evaluation of an incentive program to determine if the desired results are achieved.
Hours: 36 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52K Executive Chief Fire Officer 4B
1 unit
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching theme of this curriculum is assuming a leadership role in community events.

FIRE B52L Executive Chief Fire Officer 4C
2 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are developing a comprehensive, long-range plan; evaluating and projecting training requirements, facilities, and building needs; completing a written comprehensive risk, hazard, and value analysis; and developing a plan for a capital improvement project or program.
Hours: 36 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52M Executive Chief Fire Officer 4D
2.5 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are developing a comprehensive, long-range plan; evaluating and projecting training requirements, facilities, and building needs; completing a written comprehensive risk, hazard, and value analysis; and developing a plan for a capital improvement project or program.
Hours: 45 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52N Executive Chief Fire Officer 4E
1 unit
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching theme of this curriculum is maintaining, developing, and providing leadership for a risk management program.
Hours: 18 lecture
Transferable: Not transferable. Degree applicable.

FIRE B52O Instructor 1 - Instructional Methodology
2 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides the skills and knowledge needed for the entry level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor I certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor I will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction.
Hours: 40 lecture
Transferable: Not transferable. Degree applicable.

FIRE B60 Driver/Operator Certification
2 units
Description: Knowledge and skills in pump operations for fire engineers. Includes procedures on pumps, pumping principles,
practical hydraulics, safe apparatus operation en route and at scenes of emergencies, principles of reading and interpreting gauges, hydrant operations and drafting procedures.

Hours: 32 lecture, 8 lab
Transferable: Not transferable. Degree applicable.

**FIRE B62 Fire Fighter I Academy**
12.5 units
Prerequisite: Physical agility, medical physical, live scan, and uniform.
Description: Basic educational and practical training essential for Fire Fighter I. Advanced study of organizational procedures; forcible entry tools; protective breathing apparatus; emergency medical care; inspection procedures; fire protection equipment and systems; wildland fire control; fire behavior; and petroleum fire procedures.

Hours: 108 lecture, 351 lab
Transferable: CSU and private colleges. Degree applicable.

**FIRE B63 Fire Fighter II Academy**
3.5 units
Description: Advanced academic and manipulative training essential for the achievement of job tasks specified for Fire Fighter II. Covers general knowledge germane to the profession, fire department communications, fire ground operations, rescue operations, and prevention, preparedness, and maintenance. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications. Meets requirements for the California State Board of Fire Services, Fire Fighter II certification.

Hours: 42 lecture, 76 activity/skills, 8 testing
Transferable: Not transferable. Degree applicable.

**FIRE B64 State Fire Fighter I Academy**
16.5 units
Prerequisite: Successful completion of EMTC B51 with a grade of C or better. Physical agility, medical physical, live scan, and uniform.
Description: Provides the skills and knowledge needed for the entry level fire fighter, career or volunteer, to perform their duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the 2012 edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications and the 2008 edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. The curriculum includes: fire department communications, fire ground operations, rescue operations, preparedness and maintenance, wildland suppression activities, and hazardous materials/WMD.

Hours: 171 lecture, 378 lab
Transferable: Not transferable. Degree applicable.

**FIRE B66 Fire Fighting Skills**
8 units
Prerequisites: Successful completion of FIRE B62 or FIRE B63 or FIRE B64 with a grade of C or better.
Description: Professional development workshops and seminars related to fire fighting skills. Practical experience including utilization of fire hose, ladders, tools, salvage, chemistry, extinguisher and agents, fire control, prevention, arson, crowd and traffic control, manual aid, communications, fire and health safety, and emergency rescue techniques.

Hours: 90 lecture, 162 lab
Repeat: unlimited, legally mandated training
Transferable: Not transferable. Not degree applicable.

**FIRE B69 State Fire Fighter II Academy**
4 units
Prerequisites: Successful completion of FIRE B62 or FIRE B64 with a grade of C or better.
Description: This course provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fire ground operations, rescue operations, and prevention, preparedness, and maintenance.

Hours: 45 lecture, 81 lab
Transferable: Not transferable. Degree applicable.

**FIRE B70A Hazardous Materials for First Responders**
1 unit
Description: This class is mandated by law or called upon by necessity to assess, plan for, and initiate mitigation of incidents involving hazardous materials. Content covers the extent and nature of today’s hazardous materials problem, effects of weather, topography, and environmental conditions on the behavior of hazardous materials and the containment efforts these conditions require. Defensive tactics to contain the release from a safe distance, keep it from spreading, and prevent exposures without trying to stop the release. Meets and exceeds the requirements of CFR 29 1910.120 and CCR Title 8. This course meets National Wildfire Coordinating Group and State Fire Marshal CFSTES class.

Hours: 24 lecture
Transferable: Not transferable. Not degree applicable.

**FIRE B70B First Responder Operational-Decontamination**
0.5 unit
Description: This course will provide the hazardous materials emergency responder with the processes used in decontamination and methods to limit the spread of hazardous materials contamination in a safe and competent manner. As a National Wildfire Coordinating Group /State Fire Marshal CFSTES/ CSTI class.

Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

**FIRE B70C Hazardous Materials Incident Commander/Scene Manager**
1 unit
Description: Provide students with competencies needed to assume the role of an Incident Commander, as well as leadership skills for any other Command of Staff Incident Command System positions which are necessary during a hazardous materials incident. Content will also accentuate personnel safety and Occupational Education.

Hours: 18 lecture
Transferable: Not transferable. Not degree applicable.

**FIRE B70D Hazardous Materials Technician/Spec 1A: Basic Chemistry**
2 units
Description: Technical training in the physical and chemical terminology important to hazardous materials technicians/specialists and prevention officers, ability to determine properties of a chemical compound by name or formula. Includes
study of important terms which describe properties, reactions with other materials, and the effects upon human beings, environment, and property. Applies to Hazardous Materials Technician/Specialist certification. This also meets the State Fire Marshal California State Training Institute and CSTI California State Training Institute course requirements, Occupational Education.

Hours: 40 lecture
Transferable: Not transferable. Not degree applicable.

FIRE B70E Hazardous Materials Technician/Specialist 1B: Applied Chemistry
2 units
Description: This course will review the basic terminology and theory of chemistry as it relates to hazardous materials incident management. Additional new content to include: hazard and risk management; behavior and effect of toxicant and the major biological systems affected by toxicant; as well as using monitoring equipment to detect hazardous atmospheres and unknown solids and liquids. Applies to Hazardous Materials Technician/Specialist I certification.

Hours: 40 lecture
Transferable: Not transferable. Not degree applicable.

FIRE B70F Hazardous Materials Technician/Specialist 1C: Incident Considerations
2 units
Description: Content covers hazardous materials data research; meteorological considerations that influence hazardous materials response activities; hazardous materials incidents command concepts associated with response activities; incident specific considerations that influence hazardous materials response activities; and legislative and regulatory policies that impact hazardous materials response activities. Applies to Hazardous Materials Technician/ Specialist certification and is a California State Training Institute class.

Hours: 32 lecture, 8 lab
Transferable: Not transferable. Not degree applicable.

FIRE B70G Hazardous Materials Tech/Spec 1D: Tactical Field Operations
1.5 units
Description: Information on confinement, including diking, dams and sorbent; awareness on plugging and patching; application of chemical protective clothing; preservation of evidence; and emergency medical considerations at a hazardous materials incident. Applies to Hazardous Materials Technician/Specialist certification. Offered: As a California State Training Institute class.

Hours: 18 lecture, 27 lab
Transferable: Not transferable. Not degree applicable.

FIRE B70H Hazardous Materials Tech/Spec 1E: Special Mitigation Techniques
1 unit
Description: Content covers medical monitoring guidelines; use of Level 'A' chemical protective clothing; repair leaks on a rail tank car; procedures to simulate off-loading hydrocarbons from a rolled over DOT MC-306/406 aluminum tank truck; and practice as a member of a hazardous materials team in simulated hazardous materials incidents. Applies to Hazardous Materials Technician/ Specialist certification.

Hours: 9 lecture, 31 lab
Transferable: Not transferable. Not degree applicable.

FIRE B70I Hazardous Materials Tech/Spec 1F: Advanced Field Operations
1 unit
Description: Practical application of methods and procedures to mitigate leaking containers; transferring hazardous materials between containers; classifying known and unknown chemicals; participating as a member of hazardous materials team in simulated hazardous materials incidents; and exercising safe methods while operating at hazardous materials incidents. Applies to Hazardous Materials Technician/Specialist certification.

Hours: 9 lecture, 31 lab
Transferable: Not transferable. Not degree applicable.

FIRE B71A Seasonal Firefighter Basic Training 1
2 units
Description: Basic watershed fire behavior. Environmental factors of fire behavior which start and spread watershed fires, and basic fire suppression methods applicable to breaking the fire triangle are emphasized. Meets National Interagency Incident Management System certification. This also meets the State Fire Marshal California State Training Institute and CSTI California State Training and Education System.

Prerequisites: Successful completion of FIRE B71A with a grade of ‘C’ or better.

Description: Manipulative and technical training in the identification and operation of wildland fire tools and equipment. Includes fire-line construction practices, physical fitness and water-handling equipment. Satisfies one-half of required training standards.

Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

FIRE B71B Seasonal Firefighter Basic Training 2
1 unit
Prerequisites: Successful completion of FIRE B71A with a grade of ‘C’ or better.

Description: Manipulative and technical training in the identification and operation of wildland fire tools and equipment. Includes fire-line construction practices, physical fitness and water-handling equipment. Satisfies one-half of required training standards.

Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

FIRE B71E Wildland Fire Behavior and Control
0.5 unit
Description: Basic watershed fire behavior. Environmental factors of fire behavior which start and spread watershed fires, and basic fire suppression methods applicable to breaking the fire triangle are emphasized. Meets National Interagency Incident Management System certification.

Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

FIRE B72A Rescue Systems 1
2 units
Description: Technical knowledge and practical skills necessary to successfully perform team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. Accredited by the California Fire Service Training and Education System.

Hours: 24 lecture, 16 lab
Transferable: Not transferable. Not degree applicable.
FIRE B72D Swift Water Rescue
1 unit
Description: Basic techniques necessary to perform emergency rescue procedures involving swift water rivers. Emphasizes basic rescue knot practices, handling small rescue boats, emergency care, and controlling special hazard and problems in swift water emergencies.
Hours: 18 lecture
Transferable: Not transferable. Not degree applicable.

FIRE B72F Auto Extrication
0.5 unit
Description: A systematic approach to vehicle rescue, and the use of mechanical and hand tools used in the extrication process.
Hours: 9 lecture, 7 lab
Transferable: Not transferable. Not degree applicable.

FIRE B72I Emergency Medical Technician I Refresher
1 unit
Prerequisites: Successful completion of FIRE B72H or equivalent with a grade of ‘C’ or better.
Description: A review of material in FIRE B72H with updates on EMT-1 issues and new material or skill techniques. An approved refresher course that follows state regulations and leads to a re-certification completion certificate. This course meets the requirements to continue practicing pre-hospital emergency care in the County of Kern.
Note: Not open to students who have completed EMTC B50R.
Hours: 24 lecture
Transferable: Not transferable. Degree applicable.

FIRE B73 Intermediate Wildland Fire Behavior S-290
2 units
Description: Professional development related to the topic of wildland fire behavior. This course provides instruction in the identification and prediction of wildland fire behavior in various fuel types and under varying weather conditions. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Inter-agency Incident Management System.
Hours: 36 lecture
Transferable: Not transferable. Not degree applicable.

FIRE B79 Regional Instructor Orientation
0.5 unit
Description: This course is designed to provide instructors with an overview of State Fire Training, instructor registration requirements, instructor responsibilities and accountability, how to schedule and return courses, and manual procedures.
Hours: 9 lecture
Transferable: Not transferable. Not degree applicable.

FIRE B85 Special Topics/Fire
0.5-3 units
Description: Various mandated training topics required by California State Fire Marshal (CSFM).
Hours: 9 lecture hours for each .5 unit (9-54)
Repeat: Unlimited
Transferable: Not transferable. Not degree applicable.

FORE - Forestry Courses

FORE B1 Introduction to Forestry
3 units
Recommended: BC placement into reading level 06.
Description: The ecological, economic and sociological basis of forest management interrelated with the management of other resources. Topics include a history of forestry in America, the economics of forestry, forestry and national planning and forest uses.
Hours: 54 lecture
Transferable: UC, CSU and private colleges

FORE B2 Natural Resources
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Survey of our natural resources and the conservation of those uncaptured natural stores which are useful to humankind. Resources covered are water, soil, air, forests, grasslands, wildlife, oceans, minerals and energy. Ecology, waste management and human resources are also covered.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; CSU GE E; BC GE B.1

FORE B3 Wildlife Management
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: The practice of wildlife management. Foundations of wildlife production. The identification, life histories and ecology of selected important wildlife species - mammals including fur bearers, water fowl and fish.
Hours: 54 lecture
Transferable: CSU and private colleges.

FORE B4 Wildlife Law Enforcement
3 units
Recommended: BC placement into reading level 06.
Description: A brief history of the development of wildlife law enforcement. State functions and jurisdiction; federal jurisdiction, federal wildlife laws, federal versus state jurisdiction; rights of the private citizen. Types of violations and the role of the law enforcement officer. The function of the officer, including arrests, preparation of evidence, interviewing and court appearances.
Hours: 54 lecture
Transferable: CSU and private colleges.

FORE B5 Identification of California Wildlife
3 units
Description: A survey of game birds, fish, mammals of California and the Western United States. Characteristics of game animals and protected species. Practices identifying animals in their environment. Emphasizes protecting species which are in danger of extinction.
Hours: 54 lecture
Transferable: CSU and private colleges.
FORE B6 Forestry Skills
3 units
Recommended: BC placement into reading level 06.
Description: Survey of the forestry, wildlife and natural resources management industries. Careers, job requirements, terminology, employment opportunities and the identification and/or use of selected tools and equipment. Field trips required. Transfers as an Agriculture elective.
Hours: 18 lecture, 108 lab
Transferable: CSU and private colleges.

FORE B7 Wildland Fire Management
3 units
Description: Covers the physical theories of wildland fire, the methodology of wildland fire suppression, pre-suppression, and post-fire suppression and equipment. The practice of fire ecology and the use of prescribed control burns to maintain and improve our nation's forests and rangelands. Field trips may be required.
Hours: 54 lecture
Transferable: CSU and private colleges.

FORE B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for forestry related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).
Transferable: CSU and private colleges.

GEOG - Geography Courses

GEOG B1 Physical Elements of Geography
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This course is the study of the earth as a physical system and its processes. Topics of inquiry are derived from the earth's four main spheres, the atmosphere, hydrosphere, lithosphere, and biosphere. They include weather and climate, Earth-sun relationships, geology, and landforms. Geographic techniques such as mapping, Geographic Information Systems (GIS) and Remote Sensing are also discussed.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1

GEOG B1L Physical Geography Lab
1 unit
Prerequisites: Successful completion of GEOG B1 with a grade of C or better or may be taken concurrently.
Recommended: BC placement into reading level 06 and writing level 06.
Description: Lab portion of Physical Geography is designed to demonstrate how material presented in Geography B1 can be applied in a working environment. Assignments are designed to help students understand and apply the concepts learned in the lecture to real world problems. Exercises include using an atlas, coordinate systems, Earth-sun relationships, weather and climate analysis, landform development, and topographic map interpretation.
Hours: 54 lab
Transferable: UC, CSU and private colleges; IGETC 5.C; CSU GE B.3; BC GE B.1

GEOG B2 Human Geography
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This course is designed to demonstrate how different human populations interact culturally with their environment. Special emphasis will be placed on concepts such as population, movement, human-earth relationships, languages, religion, economics and politics.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 4.E; CSU GE D.5; BC GE D.2

GEOG B3 Introduction to Weather and Climate
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This course is an introduction to the earth's atmosphere, weather and climate. Topics to be discussed include solar and terrestrial energy, atmospheric composition, Earth-sun relationships, temperature changes, wind and pressure systems, destructive weather patterns, frontal systems, and climate.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 4.E; CSU GE B.1; BC GE B.1

GEOG B5 World Regional Geography
3 units
Recommended: BC placement into reading level 06.
Description: Survey of the world's cultural regions and nations as interpreted by geographers, including physical, cultural, and economic features. Emphasis on spatial and historical influences on population growth, transportation networks, and natural environments. Identify important and significant features within regions.
C-ID: GEOG 125
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 4.E; CSU GE D.5

GEOL - Geology Courses

GEOL B10 Introduction to Geology
3 units
Prerequisites: BC placement into reading level 06 and writing level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent and ENGL B50 or equivalent with a grade of C or better.
Description: Introduction to the principles of geology with emphasis on the structure and origin of the earth, its present and past landscapes and the processes at work changing its surface. Students requiring lab experience should enroll in GEOL B10L.
Students will learn about the processes and forces that created these areas and be able to apply their knowledge and understanding to other geological formations around the world. Field trips required.

Hours: 18 lecture hours for each unit (18-54)
Transferable: CSU and private colleges.

HEIT - Health Information Technology Courses

HEIT B10 Introduction to Health Information Technology: Hospital Settings
3 Units
Description: This course is an introduction to health information technology systems in the acute care setting focusing on procedures for completion, maintenance, and preservation of health information. The relationship between health information management and the health care delivery system will also be discussed. Students will become familiar with the concept of accreditation, certification, and licensing of health care facilities with emphasis on the accreditation survey process.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B11 Introduction to Health Information Technology: Alternative Settings
3 Units
Description: This course is an introduction to health information management practice in alternative healthcare settings including long-term care, mental health ambulatory care, hospice, home health, and rehabilitation medicine. Focus is on the role of the health information practitioner, regulatory issues, accreditation and licensing requirements, documentation, funding and reimbursement, and electronic information systems.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B12 Basic Pharmacology
3 Units
Description: Introduction to pharmacology, basic pharmacological terminology and concepts, drug categories and their uses, mechanisms of drug action, dosage forms, routes of administration, and common generic and trade name medications.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B13 Human Disease
3 Units
Prerequisites: Successful completion of MEDS B60 with a grade of C or better.
Description: This course is a study of pathological processes imparting basic knowledge to Health Information Technology students. The student will study the basic concepts, terminology, etiology and characteristics of pathological processes. Diseases are classified according to both causative agent and the body system to which they relate.
Hours: 54 lecture
Transferable: Degree applicability pending.
HEIT B15 Health Statistics
3 Units
Description: This course provides instruction for the health information technology student in the basic principles of data collection and calculation of hospital and non-acute facility health statistics. Calculation of Health Information Management department statistics is included. In addition, the course covers the calculation of specific vital statistics as well as discharge analysis reporting. There is instruction in the preparation of monthly and annual medical, administrative, and outside agency reports utilizing tables and graphs. Practice in the interpretation of statistical reports is also provided.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B16 Computerized Health Information Systems
3 Units
Description: This course will provide practical experience in the use of software programs commonly used in health information, including master patient index, chart tracking, abstracting, encoders and groupers, release of information, birth registration, and incomplete record management systems. Emphasis will also be placed on the use of spreadsheet and database programs in the manipulation and use of health information.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B20 International Classification of Diseases, (ICD) Coding I
4 Units
Prerequisites: Successful completion of HEIT B13 with a grade of C or better.
Description: This is the first of a two-course sequence for Health Information Technology students. It focuses on the International Classification of Diseases (ICD), the most commonly used classification system in the U.S. for coding and reporting diagnostic inpatient and outpatient services and inpatient procedural services. Coding guidelines, conventions and reimbursement methodology are covered in this course. The student uses both the code books and computer software program.
Hours: 72 lecture
Transferable: Degree applicability pending.

HEIT B21 International Classification of Diseases, (ICD) Coding II
4 Units
Prerequisites: Successful completion of HEIT B20 with a grade of C or better.
Description: This course is the second of a two-course sequence for Health Information Technology students. The emphasis is on advanced principles of International Classification of Diseases (ICD), the most commonly used classification system in the U.S. for coding and reporting diagnostic inpatient and outpatient services and inpatient procedural services. Coding guidelines, conventions and reimbursement methodology are also covered. Advanced principles include Diagnostic Related Group (DRG) case mix derivation, analysis of compliant coding, documentation improvement for correct code assignment, hospital acquired conditions, and present admission indicators that impact the code assignment and revenue cycle. The student uses both the code books and computer software program.
Hours: 72 lecture
Transferable: Degree applicability pending.

3 Units
Prerequisites: Successful completion of HEIT B13 with a grade of C or better.
Description: This introductory course for Health Information Technology students includes the use of Current Procedural Terminology (CPT) coding. The course covers the purpose of CPT, CPT Manual format, code format, and coding steps used to code from the divisions of CPT. In addition, the course includes national and category III codes. It also includes an overview of reimbursement issues involving physician and hospital payment for outpatient services.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B23 Medical Legal Aspects of Health Information
3 Units
Description: This course for health information technology students covers the legal aspects of health information management, including the American legal system and causes of medical malpractice. State, Federal and other agency rules regarding record access, retention, release of information, processing subpoenas, and confidentiality will be covered. Also included are accreditation, licensing, and certification requirements for acute as well as non-acute health care facilities.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B24 Healthcare Quality Management
3 Units
Description: This course for Health Information Technology students is an introduction to quality and performance management and improvement, utilization review and risk management. The course includes the purpose, principles, historical development, assessment and analysis techniques, and application and program development strategies used in quality management and improvement, utilization review and risk management activities. Also included is the integration of performance improvement activities with the medical staff appointment and reappointment process. Regulatory and privacy requirements will also be addressed. The key concepts, background and statistical tools used in the continuous quality improvement process (CQI) are also provided.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B25 Healthcare Reimbursement
3 Units
Description: This course integrates information about all US healthcare payment systems. The topics covered include reimbursement methodologies, clinical coding and compliance, voluntary and government sponsored insurance plans, revenue cycle management and value-based purchasing. Medicare and Medicaid prospective payment systems are also addressed in acute, post-acute, ambulatory, hospice and long term care settings.
Hours: 54 lecture
Transferable: Degree applicability pending.

HEIT B26 Supervision for the Allied Health Professional
3 Units
Description: This course studies classic and current management principles in the healthcare setting. Students will be introduced to leadership styles, motivation principles, ethical standards,
HIST B1 World History from the Origins of Civilizations to 1600
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Survey of the historical development of different world societies’ major economic, intellectual, political, religious, cultural and social ideas and institutions from Paleolithic humanity to the Early Modern Era.
C-ID: HIST 150
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

HIST B2 History of the World (Since 1650)
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Interdisciplinary multimedia approach to the development of our interconnected and interdependent modern world since the 16th Century. Emphasis is on comparative history, world systems, modernization theory, cultural diffusion, and ecologies of core/periphery associations.
Hours: 54 lecture
C-ID: HIST 160
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

HIST B4A European Civilization
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Survey of history of European civilization from its origin to 1650. Course will examine the different economic, intellectual, political, religious, cultural and social ideas and institutions of the different ethnic and national groups of Europe as they developed from its origin to 1650. Course includes critical thinking and evaluation skills development in analysis and interpretation of historical evidence.
Hours: 54 lecture
C-ID: HIST 170
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

HIST B4B European Civilization
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A survey history of the early and late modern eras in European History and its influence on other ‘westernized’ nations. Course will examine the different economic, intellectual, political, religious, cultural and social ideas and institutions of the different ethnic and national groups of Europe as they developed from 1600 to the present. Course includes critical thinking and evaluation skills development in analysis and interpretation of historical evidence.
Hours: 54 lecture
C-ID: HIST 180
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

HIST B15 Civilizations of the Middle East
3 units
Recommended: BC placement into reading level 06.
Description: An introduction to the history and culture of the Middle East from the rise of Islam in the 7th century to the present. Includes the study of government, family, social classes, religion, politics, and conflict in the region.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE C.2; CSU GE D.6; BC GE D.2

HIST B17A History of the United States
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Survey of the political, economic and cultural history of the United States from earliest colonial times to 1877. Includes
a study of the U.S. Constitution and federal government. Partially satisfies the requirements in U.S. Constitution, American history and institutions.
Note: HIST B17A is not a prerequisite to HIST B17B.
Hours: 54 lecture
C-ID: HIST 130
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.6; BC GE D.2; BC GE D.3

HIST B17B History of the United States Since 1870
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Survey of the political, economic and cultural history of the United States from Reconstruction to the present. Includes a study of the U.S. Constitution and federal government. Partially satisfies the requirements in U.S. Constitution and American history and institutions.
Note: HIST B17A is not a prerequisite to HIST B17B.
Hours: 54 lecture
C-ID: HIST 140
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.6; BC GE D.2; BC GE D.3

HIST B18 History of California
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: The social, economic, and political development of California from its pre-European past to its post-industrial present. Examines the historical uniqueness of California's environment, population, institutions, and economy. Emphasis placed on the influence of American political thought and institutions in the historical evolution of California's state and local governments. Partially satisfies the requirements in U.S. Constitution, American history and institutions.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.6; BC GE D.2; BC GE D.3

HIST B20A African American History of the United States
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Survey of the political, economic, and cultural history of the United States from earliest colonial times to reconstruction with emphasis on the role and contributions of African Americans. Includes a study of the U.S. Constitution and federal government. Partially satisfies the requirements in U.S. Constitution, American history and institutions. Meets the Multicultural Requirement.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.3; CSU GE D.6; BC GE D.2; BC GE D.3

HIST B20B African American History/U.S.
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Survey of the political, economic, and cultural history of the United States from reconstruction to the present with emphasis on the role and contributions of African Americans. Includes a study of the state and local government of California. Satisfies the requirements in U.S. Constitution, American history and institutions.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.3; CSU GE D.6; BC GE D.2

HIST B25 Introduction to Women in American History
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Survey of the history of women in America from the pre-colonial period to the present. Emphasis is on the social, economic, political, and multicultural facets of women's history in the US and includes both the commonalities and diversities of women's roles, the use of gender as an analytic category, and the specific significance of women in the evolution of the major contours of US history.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.D; CSU GE D.4; CSU GE D.6; BC GE D.2

HIST B30A Early Chicano History
3 units
Recommended: BC placement into reading level 06.
Description: A survey of the history of the peoples of the Mexican-American borderlands, from Pre-Columbian times until 1848. Examines the social, economic, and political evolution of the region with emphasis upon the inter-relationships between the histories of the United States and Mexico. Partially satisfies the requirements in U.S. Constitution, American history and institutions. Not open to students who have successfully completed CHST B30A.
Hours: 54 lecture

HIST B30B History of Chicanos in the Southwest
3 units
Recommended: BC placement into reading level 06.
Description: Survey of the Chicanos and the U.S. with an emphasis on the developments in California and the Southwest from 1848 to present: relationship of regions within the U.S. area, roles of major ethnic groups, continuity of American experience, derivation from other cultures, aftermath of the U.S. Mexican War, interrelationship of Mexican and U.S. history between 1860 and 1910, effects of Mexican Revolution on the 20th century experience of Chicanos, California State Constitution. Partially satisfies requirements in U.S. Constitution, American history and institutions.
Note: Not open to students who have taken the equivalent course, CHST B30B.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F; CSU GE D.3; CSU GE D.6; BC GE D.3

HIST B33 Latin American History
3 units
Description: Historical survey of the social, economic and political development of Latin America, including the formation of pre-Columbian civilization through establishments of the Spanish and Portuguese colonial systems to nation building of the modern era. Examines the impact of the United States'
foreign policy on the development of Latin America.
Note: Not open to students who have completed CHST B33.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F;
CSU GE C.2; CSU GE D.3; CSU GE D.6; BC GE D.2

HIST B36 History of Native American Indians
3 units
Recommended: BC placement into reading level 06 and writing
level 06.
Description: Survey of the origins, traditions, lifeway and belief
systems of various Native American communities. Emphasis on
socio-political encounters with Anglo American expansion and
indigenous resilience. Partially satisfies the requirements in U.S.
Constitution, American history and institutions.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 4.F;
CSU GE D.3; CSU GE D.6; BC GE D.2; BC GE D.3

HLED - Health Education Courses

HLED B1 Principles of Health Education
3 units
Recommended: BC placement into reading level 06 and writing
level 06.
Description: A survey of Health as expressed through the
interdependence of the intellectual, emotional, environmental,
physical, social and spiritual dimensions of wellness.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

HMSV - Human Services Courses

HMSV B5 Human Services Internship
2 units
Prerequisites: HMSV B40. Student must have completed HMSV
B40, attend a mandatory orientation, and obtain the signature
of the Human Services Program Coordinator before enrolling in
HMSV B5.
Description: Study of human services organizations; Work
internship under supervision in a human services field;
Emphasizes integrating theory with practical application;
Participation criteria may vary among the participating human
services agencies; Signature of the Program Coordinator is
required to register for this class.
Note: Eligible interns may take two units per semester until a
total of four units (216 hours of field work) has been completed.
Two units equal 18 hours seminar and 108 hours field work.
Hours: 18 lecture, 54 lab
Repeat: 2
Transferable: CSU and private colleges.

HMSV B40 Introduction to Human Services
3 units
Recommended: BC placement into reading level 06.
Description: Survey of helping institutions and social issues
concerning human services, including target populations; survey
of human services careers; historical, ethical, and theoretical
perspectives of social and public policy; current controversies
concerning human services; institutional and community-based
services; diversity; models of service delivery; helping process
techniques and skills.
Hours: 54 lecture
Transferable: CSU and private colleges.

INDA - Industrial Automation Courses

INDA B100 Industrial Design Graphics I
3 units
Prerequisites: Successful completion of INDR B12 with a grade
of C or better and admission to Industrial Automation Bachelor's
Degree program.
Description: The application of two-dimensional industrial
design techniques (sketching, drafting, and Computer Aided
Drafting) taught within the context of automation and process
design. Students will gain design and management skills
while generating process flow diagrams (PFD's), piping &
instrumentation diagrams (P&ID's), and control panel layouts.
Hours: 36 lecture, 54 lab
Transferable: Bachelor's Degree Applicable; Career and Technical
Education (CTE)

INDA B101 Industrial Design Graphics II
3 units
Prerequisites: Successful completion of INDA B100 with a grade
of C or better and admission to Industrial Automation Bachelor's
Degree program.
Description: The application of three-dimensional industrial
design techniques taught within the context of automation
and process design. Students will utilize mechanical
Computer Aided Drafting software (SolidWorks/Inventor) to
design weldments, piping/conduit systems, and sheet metal
assemblies. Design projects will emphasize technical and
project management skills.
Hours: 36 lecture, 54 lab
Transferable: Bachelor's Degree Applicable; Career and Technical
Education (CTE)

INDA B105 Materials Science for the Technician
3 units
Prerequisites: Successful completion of PHYS B2A or PHYS B4A
and MATH B1A OR MATH B2 OR MATH B6A with a grade of C or
better and admission to Industrial Automation Bachelor's Degree
program.
Description: An introduction to materials science for technicians
and technologists. Topics to be presented include atomic
structure of materials, electrical and mechanical properties,
properties testing, basic metallurgy, corrosion and wear, and
materials selection. Materials covered include ceramics,
polymers and composites, steels, and nonferrous metal alloys.
Students will also be introduced to processes including heat

will focus on selection, connection, and calibration of industrial strategies, and process safety. Applications of instrumentation as single and dual loop controller tuning, basic process control and PLC (programmable logic controllers) including topics such as motion control. Implementation of controller operations using industrial instrumentation and control for use in process and motion control. Students will research product data sheets and create documentation that cover topics such as process flow diagrams, P&ID's, loop diagrams, operation and troubleshooting procedures. Lab activities will be provided with actual equipment and software used in industry.

**INDA B110 Industrial Automation Networks**
3 units
Prerequisites: Successful completion of ELET B58 and ELET B61 with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.
Description: The basic theory and implementation of industrial automation networks, including digital data, industrial control networks, instrumentation and process control bus and network standards, SCADA (Supervisory Control and Data Acquisition) and DCS (Distributed Control Systems), and essentials of human-machine interface (HMI) panels connection, programming, and modification of programs and features.
Hours: 36 lecture, 54 lab
Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

**INDA B114 Industrial Safety Principles and Management**
3 units
Prerequisites: Admission to Industrial Automation Bachelor's Degree program
Description: An overview of components of successful safety and industry hygiene programs, best practices, OSHA reporting requirements, legal and ethical obligations of both employer and employee, principles of safety management, assessment of hazards associated with various industrial processes and facilities, and protective measures used to minimize hazards such as personal protective equipment, hazard management, education and training options, and incentive programs.
Hours: 54 lecture
Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

**INDA B120 Industrial Automation Systems - Robotics**
3 units
Prerequisites: Successful completion of ELET B4 with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.
Description: A study of industrial automation systems, including principles of robotics, power supplies and movement systems, sensing and end-of-arm tooling, and control systems and maintenance.
Hours: 36 lecture, 54 lab
Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

**INDA B122 Applied Methods of Motion and Process Control**
3 units
Prerequisites: Successful completion of ELET B55 or ELET B55a and ELET B56 with a grade of C or better and admission to Industrial Automation Bachelor's Degree program.
Description: Methods of implementing and documenting industrial instrumentation and control for use in process and motion control. Implementation of controller operations using stand-alone PID (proportional integral derivative) controllers and PLC (programmable logic controllers) including topics such as single and dual loop controller tuning, basic process control strategies, and process safety. Applications of instrumentation will focus on selection, connection, and calibration of industrial sensors and signaling methods. Measurement parameters will include, pressure, flow, temperature, level, distance, pH (potential of hydrogen), RPM (revolution per minute), linear and angular velocity, and position. Applications of control will include Variable Frequency Drives (VFD), electric, pneumatic, and hydrologic actuators, and their application with control valves, motors, and servos for use in process and motion control. Students will research product data sheets and create documentation that cover topics such as process flow diagrams, P&ID's, loop diagrams, operation and troubleshooting procedures. Lab activities will be provided with actual equipment and software used in industry.
Hours: 36 lecture, 54 lab
Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

**INDA B125 Operations Management in the Automation Field**
3 units
Prerequisite: Admission to Industrial Automation Bachelor's Degree program
Description: An Introduction to Operations Management and study of automation processes. Students will analyze and improve business processes in services and manufacturing, learning how to increase productivity and deliver high quality standards. Key concepts include process analysis, bottlenecks, flows rates, and inventory levels.
Hours: 54 lecture
Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

**INDA B132 Project Management**
3 units
Prerequisites: Admission to Industrial Automation Bachelor's Degree program
Description: This course provides hard information and skills to work successfully in a project environment and to accomplish project objectives. It will equip students by explaining concepts and techniques and by using numerous examples to show how they can be skillfully applied. Topics covered in this course include project management life cycle and process; identifying and selecting projects; developing a project proposal; techniques for planning, scheduling, resource assignment, budgeting, and controlling project performance; project risks; project manager responsibilities and skills; project team development and effectiveness; project communication and documentation; and project management organizational structures. The concepts in the course support the project management knowledge areas of the Project Management Institute’s A Guide to the Project Management Body of Knowledge (PMBOK® Guide).
Hours: 54 lecture
Transferable: Bachelor's Degree Applicable; Career and Technical Education (CTE)

**INDA B135 Economic Decision Making**
3 units
Prerequisite: Admission to Industrial Automation Bachelor's Degree program
Description: A study of the methodologies for estimating and forecasting product and service costs. Topics include labor and material cost analysis; accounting analysis including financial statements, depreciation, budgeting, and overhead allocation; forecasting techniques; general cost estimating methods; operations estimating and analysis; product cost estimating, and
breakeven models
Hours: 54 lecture
Transferable: Bachelor’s Degree Applicable; Career and Technical Education (CTE)

**INDA B140 Quality Management**
3 units
Prerequisites: Admission to Industrial Automation Bachelor’s Degree program
Description: An overview of the various methods of quality assurance (the systematic process of determining whether products meet customers’ expectations), quality control (the systematic process of determining the quality and consistency of products), and efficient manufacturing processes (using techniques that determine the most efficient method of manufacturing and logistics). Strategies such as Six-Sigma, Lean Manufacturing, Failure Mode Analysis, ISO 9001, and various continuous improvement programs will be examined.
Hours: 54 lecture
Transferable: Bachelor’s Degree Applicable; Career and Technical Education (CTE)

**INDA B143 Materials and Maintenance Management**
3 units
Prerequisite: Admission to Industrial Automation Bachelor’s Degree program
Description: Principles and practices of maintenance department organization, prevention procedures, and typical equipment problems. Includes related topics such as plant protection, preventative and plant maintenance. Analytical methods used to support inventory replenishment for the production of goods and services.
Hours: 54 lecture
Transferable: Bachelor’s Degree Applicable; Career and Technical Education (CTE)

**INDA B144 Leadership**
3 units
Prerequisites: Admission to Industrial Automation Bachelor’s Degree program
Description: Fundamental historical basis of ethics and character are studied with emphasis on the origin of the factors that many cultures derive their ethical standards. Relationship of how these standards relate to operations management and business. The characteristics of leadership and the ethical qualities that make a person an effective leader in today’s business and industrial environment are analyzed. The laws of leadership and examples that specific leaders exhibit these laws are discussed with emphasis on individual growth as a leader in today’s market.
Hours: 54 lecture
Transferable: Bachelor’s Degree Applicable; Career and Technical Education (CTE)

**INDA B150 Systems Design and Integration (Senior Project)**
3 units
Prerequisites: Admission to Industrial Automation Bachelor’s Degree program and INDA B132 with a grade of C or better.
Description: Students will work in teams to design, plan for production, and integrate various automation technologies into the production of a simple product; or partner with industry members to analyze and provide recommendations for actual problems.
Hours: 9 lecture, 135 lab
Transferable: Bachelor’s Degree Applicable; Career and Technical Education (CTE)

**INDR - Industrial Drawing Courses**

**INDR B12 Introduction to Drafting and CAD**
2 units
Description: Introductory course dealing with conventional drafting methods and a computer aided drafting and design (CAD) program to obtain graphic solutions, design modifications, and delineations for industrial, architectural, and engineering drawings. Emphasizes basic drafting and CAD skills.
Note: Not open to students who have taken INDR B10 and INDR B11.
Hours: 18 lecture, 54 lab
Transferable: CSU and private colleges.

**INDR B20A Computer Aided Drafting and Design (CAD)**
3 units
Prerequisites: Successful completion of INDR B12 with a grade of C or better or equivalent experience to be evaluated by the instructor.
Description: An intensive course utilizing a computer aided design (CAD) program to obtain graphic solutions, design refinements, modifications, and delineations in both 2D and 3D for industrial, architectural, and engineering drawings. Emphasizes technology skills that are necessary to function as an entry-level CAD operator.
Materials Fee: $10.00
Hours: 27 lecture, 81 lab
Transferable: UC, CSU and private colleges

**INDR B20B Computer Aided Drafting and Design (CAD)**
3 units
Prerequisites: Prerequisites: Successful completion of INDR B20A with a grade of C or better.
Description: Continuation of the sequence utilizing a computer aided drafting (CAD) program to obtain graphic solutions, design refinements, modifications, and delineations in both 2D and 3D for industrial, architectural and engineering drawings. Emphasizes technology skills that are necessary to function as an entry-level CAD operator.
Materials Fee: $3.00
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges

**INDR B40 Parametric Modeling Fundamentals**
3 units
Description: This class will introduce basic and advanced parametric modeling techniques. Three-dimensional models of mechanical objects will be used to generate two-dimensional drawings (including views, sections, details, dimensions, and assembly drawings). Emphasis on design and digital prototyping will run throughout the course. The course is project-based and will include the use of a 3D printer and the creation of animations to communicate design concepts.
Hours: 27 lecture, 81 lab
Transferable: Degree applicable.
INDR B42 Introduction to Solidworks
2 units
Description: A foundational course in the use of Solidworks mechanical design software. Students will utilize 3D solid modeling techniques to generate and edit parts, assemblies, and detail drawings.
Hours: 27 lecture, 27 lab
Transferable: Degree applicable.

INDR B48WE Occupational Work Experience Education
1-8 Units
Prerequisite: Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for Industrial Drawing related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit at paid work experience; 60 hours per semester unit volunteer work experience per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).
Transferable: Not transferable. Degree applicable.

INDR B50 Process Piping
3 units
Prerequisites: Successful completion of INDR B10 and INDR B11 or INDR B12 with a grade of C or better.
Description: An intermediate-level CAD course that is structured to impart the foundation knowledge and essential technical skills required to succeed in the field of process pipe drafting. Areas of study include units on industry standards, delineation conventions, and the creation of piping plans, isometric drawings, and process flow diagrams.
Materials Fee: $5.00
Hours: 27 lecture, 81 lab
Transferable: Not transferable. Degree applicable.

INDR B51 Electrical Design
3 units
Prerequisites: Successful completion of INDR B12 with a grade of C or better.
Description: Introduces students to the techniques necessary to create professional electrical control drawings using AutoCAD Electrical. Elements included in the class include building circuits, creating panel drawings, ladder diagrams, and generating reports.
Materials Fee: $3.00
Hours: 27 lecture, 81 lab
Transferable: Not transferable. Degree applicable.

INDR B52 Civil Drafting and Geographic Information Systems
3 units
Prerequisites: Successful completion of INDR B20A or equivalent with a grade of C or better.
Description: Modern Geographic Information Systems. Students will use CAD software to perform model-based infrastructure planning and development. Emphasis on solving problems in either Land Information Systems or Facilities Management Systems. Database Management will also be emphasized.
Hours: 27 lecture, 81 lab
Transferable: Not transferable. Degree applicable.

INDT - Industrial Technology Courses

INDT B5 Architectural Woodworking and Design
1 unit
Prerequisites: Successful completion of ARCH B6 or equivalent with a grade of C or better or may be taken concurrently.
Description: Students will complete an architectural woodworking project of their own design, including conceptual drawings of the design. Emphasis is on woodworking lab safety. Covers the incorporation of woodworking joinery.
Hours: 9 lecture, 27 lab
Transferable: CSU and private colleges.

INDT B10 Occupational Readiness
3 units
Description: Orientation to Bakersfield College and post-secondary education in California. Survey of various fields of industrial technology, career opportunities and requirements, development of a personal education plan. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College. Elective credit only.
Hours: 54 lecture
Transferable: CSU and private colleges.

INDT B48WE Occupational Work Experience Education
1-8 Units
Prerequisite: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for Industrial Technology related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit at paid work experience; 60 hours per semester unit volunteer work experience per unit. Repetition allowed per Title 5 55253.
Hours: Paid 75 hours for each 1 unit (75-600). Non-paid 60 hours for each 1 unit (60-480).
Transferable: Not transferable. Degree applicable.

INDT B271 Special Problems in Welding
2 units
Prerequisites: Successful completion of WELD B1A, WELD B1B, WELD B53A, WELD B74A, and WELD B74B with a grade of C or better.
Description: Provides individual students the opportunity to explore various segments of welding such as various welding processes and codes, fabrication techniques, layout, and testing and preparation for certification. Development and implementation of meaningful, self-directed studies in areas where student desires specific technical and related skill development necessary for enrichment or employment.
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

INDT B272 Special Problems in Electronics
2-3 units
Prerequisites: Completion of minimum of 9 units of electronics courses with a grade of 'C', or equivalent experience or evaluation by instructor. Completed Petition for Individual Study form.
Description: Provides individual students the opportunity to
explore various segments of electronics. Development and implementation of meaningful, self-directed studies in areas where student desires specific technical and related skills development necessary for enrichment or employment.

**INDT B273 Special Problems in Machine Tool Metal Working**

2-3 units

Prerequisites: Completion of minimum of 6 units of machine tool courses with a grade of ‘C’ or equivalent experience or evaluation by instructor. Completed Petition for Individual Study form.

Description: Provides individual students the opportunity to explore various segments of machine tool metal working. Development and implementation of meaningful, self-directed studies in areas where student desires specific technical and related skills development necessary for enrichment or employment.

Hours: 18 lecture hours for each unit (36-54)

Transferable: Not transferable. Not degree applicable.

**INDT B274 Special Problems in Woodworking**

2-3 units

Recommended: Concurrent enrollment in a woodworking technology related course or previous woodworking and/or cabinetmaking experience.

Description: Course is intended to provide students the ability to, on an independent study basis, the opportunity to explore various segments of the woodworking and cabinetmaking industry. The primary intent of this course is to develop and implement meaningful, self-directed studies in areas where the student desires specific technical and/or skill development.

Hours: 54 lab hours for each unit (108 – 162)

Transferable: Not transferable. Not degree applicable.

**INDT B275 Special Problems in Automotive Technology**

2 units

Description: Provides the individual students the opportunity to explore various segments of automotive. Development and implementation of meaningful, self-directed studies in areas where the student desires specific technical and related skill development necessary for enrichment or employment.

Hours: 27 lecture, 27 lab

Transferable: Not transferable. Not degree applicable.

**JAPN - Japanese Courses**

**JAPN B1 Elementary Japanese I**

4 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Introduction to Japanese language and culture. Special emphasis is on speaking and understanding Japanese along with mastering elementary grammar and composition while learning the characters of Japanese alphabets.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

**JAPN B2 Elementary Japanese II**

4 units

Prerequisites: Successful completion of JAPN B1 with a grade of C or better.

Description: Continuing of elementary course introducing Japanese language and culture. Special emphasis on speaking and understanding Japanese along with mastering elementary grammar and composition while learning the characters of Japanese alphabets. Requires practice with audiotape/CD program outside of class.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

**JAPN B3 Intermediate Japanese**

4 units

Prerequisites: Successful completion of JAPN B2 with a grade of C or better.

Description: Course provides the students with further knowledge and communication skills in Japanese in all 4 areas: speaking, listening, reading and writing. In addition to the polite/distant style, the course further develops oral communication skills in other speech styles such as direct style and honorific style. Students should be able to read and write about 200 kanji (Chinese characters) in this course.

Hours: 72 lecture

Transferable: UC, CSU and private colleges; BC GE C.2

**JRNL - Journalism Courses**

**JRNL B1 Media and Society**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: A study and evaluation of mass media and how it shapes societies and cultures. The focus provides the media consumer with a historical and a theoretical perspective on newspapers, magazines, books, Internet, television, radio, public relations, advertising, and motion pictures. Course content discusses media law and ethics, controversial topics as well as topics of current interest. Field trips may be required.

Hours: 54 lecture

C-ID: JOUR 100

Transferable: UC, CSU and private colleges; IGETC 4.G; CSU GE D.8; BC GE D.2

**JRNL B2 Beginning Reporting**

3 units

Recommended: BC placement into reading level 06 and writing level 06.

Description: Introduction to journalism through the study of practical application of various techniques. Concentration on recognizing story ideas, gathering information from sources, news judgment, ethics, proper style and writing. Emphasizes news, features, sports and opinion writing. Prepares students for possible role on a student newspaper.

Hours: 54 lecture

C-ID: JOUR 110

Transferable: CSU and private colleges.
JRNL B15 Press Photography
3 units
Description: Study and application of digital photography as applied to journalism. Covers technical aspects of cameras, use of Photoshop, how to photograph assignments in the field and choosing photographs for print. Entry-level photojournalism course prepares students for enrollment in student newspaper. Important: Digital camera required.
Hours: 36 lecture, 54 lab
C-ID: JOUR 160
Transferable: CSU and private colleges.

JRNL B16 Multimedia Reporting
3 units
Description: Study and application of photography applied to emerging changes in the journalism landscape, specifically visual and audio communication through new media. Emphasizes the combined use of still cameras, audio recording equipment and video cameras to produce in-depth, content-rich reporting for journalism Web sites.
Hours: 36 lecture, 54 lab
C-ID: JOUR 120
Transferable: CSU and private colleges.

JRNL B25 Newspaper/Online Production I
3 units
Recommended: JRNL B2 with a grade of C or better and BC placement into reading level 06 and writing level 06.
Description: Production practicum for the print and online editions of 'The Renegade Rip,' BC's award-winning student-produced newspaper. Offers experience in interviewing research, news, feature, sports, and opinion reporting, design and production of editorial cartoons, headline writing, copyediting, proofreading, introduction to page design, graphics, and computer use. Students wishing to report stories, create editorial cartoons, or create graphics for the college newspaper should be enrolled.
Hours: 18 lecture, 108 lab
Transferable: Not transferable.

JRNL B26 Newspaper/Online Production II
4 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Designed for editors and second-semester students for production of the online and print editions of The Renegade Rip, BC's award-winning student-produced college newspaper. Teaches news content analysis, planning and evaluation of editorial cartoons, headline writing, copyediting, proofreading, introduction to page design, graphics, and computer use. Students wishing to report stories, create editorial cartoons, or create graphics for the college newspaper should be enrolled.
Hours: 18 lecture, 108 lab
Repeat: unlimited
Transferable: UC, CSU and private colleges.

LIBR - Library Courses

LIBR B1 Introduction to Library Research
1 unit
Prerequisites: BC placement into reading level 06 and writing level 06 or successful completion of ACDV B50 or ACDV B61 or equivalent or ENGL B50 or equivalent with a grade of C or better.
Description: Emphasizes developing research skills in order to locate and evaluate relevant and appropriate sources for college-level papers, speeches and other projects. Introduces students to advanced research techniques through the use of electronic databases, print resources, and the web, as well as the ethical use of information. Prepares students for research projects in English B50, English B1A, and other courses with research components.
Hours: 18 lecture
Transferable: UC, CSU and private colleges.

LIBR B55 Information Competency Workshops
0 unit
Description: Variety of hour-long workshops that assist students in gaining proficiency in all aspects of information competency. Workshop topics include research strategies, searching the online catalog for books, finding periodical articles online, using advanced techniques with Internet searching, evaluating Internet resources, evaluating print resources, and examining ethics in research (plagiarism, fair use, and copyright).
Hours: 1 lecture
Repeat: unlimited
Transferable: Not transferable. Not degree applicable.

MATH - Mathematics Courses

MATH B1A Precalculus I
4 units
Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better.
Description: Preparation for calculus; the algebraic and graphical analysis of polynomial, rational, logarithmic and exponential functions and their applications; systems of linear and nonlinear equations, graphing, inequalities, absolute value, and complex numbers.
Hours: 18 lecture, 162 lab
Transferable: CSU and private colleges. Degree applicable.
MATH B1B Precalculus II
4 units
Prerequisites: BC placement into math level 05 or successful completion of MATH B1A or equivalent with a grade of C or better.
Description: Modern concepts in mathematics emphasizing applications to business. Functions and the basic concepts of differential calculus with introductions to integral calculus and multivariable calculus.
C-ID: MATH 120
Hours: 72 lecture
Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

MATH B2 Basic Functions and Calculus for Business
4 units
Prerequisites: BC placement into Math level 05 or successful completion of B1A or equivalent with a grade of C or better.
Description: Modern concepts in mathematics emphasizing applications to business. Functions and the basic concepts of differential calculus with introductions to integral calculus and multivariable calculus.
C-ID: MATH 140
Hours: 72 lecture
Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

MATH B4A Mathematics for Elementary School Teaching
4 units
Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better.
Description: Focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including real number systems and subsystems. Emphasizes the comprehension and analysis of mathematical concepts and applications of logical reasoning. Designed for students intending to teach in K-8. Not recommended for majors in physical sciences nor mathematics.
C-ID: MATH 120
Hours: 72 lecture
Transferable: UC, CSU and private colleges; CSU GE B.4; BC GE B.2

MATH B6A Analytic Geometry/Calculus I
4 units
Prerequisites: BC placement into math level 06 or successful completion of MATH B1B or equivalent with a grade of C or better.
Description: Limits and differential calculus with an introduction to antiderivatives and integration. Includes analytic geometry and applications.
C-ID: MATH 211
Hours: 72 lecture
Transferable: Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

MATH B6B Analytic Geometry/Calculus II
4 units
Prerequisites: Successful completion of MATH B6A or equivalent with a grade of C or better.
Description: Transcendental functions, polar functions, sequences, infinite series and methods of integration. Further exposure to techniques and applications of differential and integral calculus.
C-ID: MATH 221
Hours: 72 lecture
Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

MATH B6C Calculus III
4 units
Prerequisites: Successful completion of MATH B6B or equivalent with a grade of C or better.
Description: Continuation of Calculus II. Vectors and parametric equations, vector-valued functions, partial differentiation, multiple integrals, vector analysis, including theorems of Green, Gauss and Stokes.
C-ID: MATH 230
Hours: 72 lecture
Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

MATH B6D Ordinary Differential Equations
3 units
Prerequisites: Successful completion of MATH B6C or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Vector spaces and linear transformations; elementary differential equations; Laplace transforms; series solutions and systems of differential equations; matrices; eigenvalues and eigenvectors.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4

MATH B6E Elementary Linear Algebra
3 units
Prerequisites: Successful completion of MATH B6C or equivalent with a grade of C or better.
Description: Real and complex number fields, vector spaces, linear transformation, matrices, systems of equations and matrix inversion, determinants, eigenvalues and eigenvectors.
Hours: 54 lecture
C-ID: MATH 250
Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4

MATH B21 Special Projects in Mathematics
1-2 units
Description: Individually directed work in mathematics in preparation for intercollegiate math competitions, including advanced topics, research projects, special problems and applications of mathematics to specific subject areas. Interested students should talk with their math instructors for an evaluation of their math skills. Field trips may be required.
Hours: 18 lecture hours for each unit (18-36)
Transferable: CSU and private colleges.

MATH B22 Elementary Probability and Statistics
4 units
Prerequisites: BC placement into math level 04 or successful completion of MATH B65 or MATH B70 or equivalent with a grade of C or better.
Description: Tabular, graphical, and numerical methods of summarizing data, finite probability, discrete and continuous random variables, binomial probability distribution, normal probability distribution, sampling distributions, point and interval estimation, one and two sample hypothesis testing procedures, analysis of variance, chi-square analysis, linear regression and correlation, and if time allows, nonparametric
MATH B23 Finite Mathematics
3 units
Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better.
Description: Solving equations and inequalities in one variable, relations and functions, matrices, linear inequalities in two variables, linear programming, mathematics of finance including simple and compound interest, annuities, sets and counting, and Venn Diagrams.
C-ID: MATH 130
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

MATH B50 Modern College Arithmetic and Pre-Algebra
4 units
Prerequisites: BC placement into math level 01.
Description: A general review of basic arithmetic including the fundamental operations of addition, subtraction, multiplication and division of whole numbers, fractions and decimals. Emphasis is placed on real life applications, including percents, ratios, proportions, exponents, averages, estimation, graphs and measurement. The introduction to algebra includes operations with signed numbers and solving simple equations.
Hours: 72 lecture
Transferable: Not transferable. Not degree applicable.

MATH B60 Beginning Algebra
5 units
Prerequisites: BC placement into math level 02 or successful completion of ACDV B72 or equivalent with a grade of C or better.
Description: Fundamental concepts and mathematical processes first degree equations, polynomials, special products and factoring, rational expressions and equations, ratios, proportions, exponents, averages, estimation, graphs and measurement. The introduction to algebra includes operations with signed numbers and solving simple equations.
Hours: 90 lecture
Transferable: Not transferable. Not degree applicable.

MATH B65 Intermediate Algebra for Statistics
4 units
Prerequisites: BC placement into math level 02 or successful completion of ACDV B72 or equivalent with a grade of C or better.
Description: An accelerated algebra course for non-STEM majors. Topics include simplifying algebraic expressions, manipulating and applying formulas, solving equations and inequalities in one and two variables, polynomials, and modeling with linear, exponential, and logarithmic functions.
Note: This course will only satisfy the prerequisite for MATH B22 and PSYC B5. This course should not be taken by Business majors and Elementary Teacher Education majors.
Hours: 54 lecture 54 lab
Transferable: Not transferable. Not degree applicable.

MATH B70 Intermediate Algebra
5 units
Prerequisites: BC placement into math level 03 or successful completion of MATH B60 or equivalent with a grade of C or better.
Description: Topics for the course are functions and operations on functions; system of linear equations, linear, and absolute value inequalities; linear, absolute value, and quadratic equations; radicals and operations with radicals; equations involving radicals, exponential, and logarithmic equations; and conic sections.
Hours: 90 lecture
Transferable: Not transferable. Degree applicable. BC GE B.2

MCAG - Mechanized Agriculture

MCAG B2 Introduction to Mechanized Agriculture
3 units
Description: This course covers basic mechanical skills in woodworking, cold metal, electricity, plumbing, concrete, and project construction skills as related to farm maintenance and repair. The use of hand and power tool skills as well as emphasis on safety practices for all mechanical areas are covered. A lab class is required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges

MCAG B3 Small Gas Engines
3 units
Description: This is a complete introductory course in the operation, construction, maintenance, repair, and adjustments of two-cycle and four-cycle engines. It is designed for persons without prior experience in small engines. Theory and practical work, including safety and the care and use of specialized tools used in small engine repair and maintenance, will be covered. Examples of the types of engines to be used will include lawn mower, power saw, pump, conveyor, self-propelled small carts, and any other small engines. Lab required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges

MCAG B4 Agriculture Safety
3 units
Description: This course involves safety practices and principles, accident causation and prevention in the shop and in the field, as well as with tractors and machinery. Operation, service and normal safety practices common to farming will be stressed, including welding, hand tools, and chemical applicators. Material Safety Data Sheets, Personal Protective Equipment and on-site Worker safety will be explored. Supervised field operation and field trips will be required. Lab required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges

MCAG B5 Agriculture Irrigation Technology
3 units
Description: An examination of agriculture irrigation systems, Irrigation and drainage problems relating to pumps, motors, sprinkler systems, structures, pipelines, ditches and wells; computation of costs and measurement of water; water law; basic principles of plant-soil-moisture relations, and water movement in soil. Field trips are required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges
MCAG B10 Farm Power Operation
3 units
Description: This course involves design principles, selection, maintenance, adjustment, and safe operation of wheel and track type tractors and commonly used equipment in agriculture and in the construction industry.
Hours: 36 lecture, 54 lab
C-ID: AG + MA 108L
Transferable: CSU and private colleges.

MCAG B11 Farm Power Diesel Repair
4 units
Recommended: Successful completion of MCAG B3 with a grade of C or better.
Description: This course explores the operation and repair of modern diesel engines. Principles and theories are studied by running, testing, diagnosing, disassembling and reassembling components, systems and engines.
Hours: 36 lecture, 108 lab
Transferable: CSU and private colleges.

MCAG B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student’s qualifications and objectives.
Description: College credit for mechanized agricultural related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).
Transferable: CSU and private colleges.

MEDS - Medical Science Courses

MEDS B35 Lifespan Development
3 units
Recommended: BC placement into reading level 06.
Description: Study of normal human growth and development in prenatal, childhood, adolescent, adult and old age periods. Offers a balanced study of basic theories, research, applications; principles of physiological, cognitive, and psychosocial development are discussed. Related observations are required. Health maintenance and safety issues for all age levels are incorporated. Concepts of death and dying are considered.
Hours: 54 lecture
C-ID: PSY 180
Transferable: CSU and private colleges; CSU GE E; BC GE E

MEDS B52 Cardiopulmonary Resuscitation for Healthcare Providers
0.5 unit
Description: An initial and retraining course in Basic Life Support that provides basic knowledge and skills of Basic Life Support and AED use for victims of all ages. Skills learned in the class will enable the students to recognize emergencies and how to respond to them. At the end of the course, the students will qualify for an American Heart Association Healthcare Provider BLS card. Repeat: As needed for recertification. Note: In addition to the scheduled hours, students must arrange a total of 2 required class hours in which students must obtain materials from the college bookstore. Prior to the first class meeting student must read manual and view DVD.
Materials Fee: $12.00
Hours: 9 lecture
Repeat: Unlimited, legally mandated training
Transferable: Not transferable. Degree applicable.

MEDS B60 Medical Terminology
3 units
Description: A study of basic medical terms related to the major body systems. Three units are required for radiologic technology, medical billing, and transcribers.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

MEDS B66 Intravenous Therapy and Blood Withdrawal
2 units
Prerequisites: Enrollment in or completion of an Associate Degree or Vocational Nursing program.
Description: This course introduces the principles of intravenous therapy and blood withdrawal. The course is designed to enable the Licensed Vocational Nurse to safely initiate and maintain intravenous therapy and to perform blood withdrawal in a clinical setting. This course is approved by the Board of Vocational Nurses and Psychiatric Technicians and enrollment in or completion of an Associate Degree or Vocational Nursing Program is required.
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Not degree applicable.

MEDS B68 Home Health Aide
1.5 units
Prerequisites: Successful completion of MEDS B69 with a grade of C or better.
Description: This course follows the California Department of Public Health (CDPH) guidelines and builds upon the foundation of the nurse assistant training. The course is designed to prepare students to work with clients in the home setting and includes a minimum of 20 hours in the clinical setting. Skills competencies will be assessed utilizing objective, measurable criteria. Upon completion of the course the student will be eligible for the State of California Home Health Aide certification.
Hours: 18 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

MEDS B69 Nurse Assistant
6 units
Prerequisites: Successful completion of MEDS B69 with a grade of C or better. Successful completion of MCAG B3 with a grade of C or better.
Description: College credit for mechanized agricultural related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Materials Fee: $69.00
Hours: 63 lecture, 135 lab
Transferable: Not transferable. Not degree applicable.
MFGT - Manufacturing/ Machine Technology Courses

MFGT B1AB Machine Tool Processes
3 units
Recommended: BC placement into reading level 06.
Description: An introduction to machine tool technology including the use of precision measuring instruments, drilling machines, saws, lathes, and vertical milling machines.
Note: Elective credit only.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

MFGT B2 CNC Lathe Programming & Operation
3 units
Recommended: Successful completion of MFGT B1AB with a grade of C or better or evaluation by instructor of students machining skills and BC placement into reading level 06.
Description: Set-up, operation and programming of a computer numerical control lathe.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

MFGT B3 CNC Mill Programming
3 units
Recommended: Successful completion of MFGT B1AB with a grade of C or better and BC placement into reading level 06.
Description: Programming, set-up, and operation of computer numerical control milling machines. G-code programming is emphasized along with the use of CAD/CAM software.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

MFGT B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student’s qualifications and objectives.
Description: College credit for Manufacturing Technology related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit at paid work experience; 60 hours per semester unit volunteer work experience. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).
Transferable: Not transferable

MUSC - Music Courses

MUSC B2 Basic Elements of Music
3 units
Description: Designed for the student with little or no previous experience in the reading and writing of music. Development of beginning skills in music notation and basic elements of music theory. Course also serves as pre-requisite for Music B4A Elementary Theory.

MUSC B4A Elementary Theory
3 units
Prerequisites: Successful completion of MUSC B2 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: A study of common practice harmony. Diatonic harmony including scales, key signatures, triad and seventh chord constructions and 4-part voice leading including phrase structure.
Hours: 54 lecture
C-ID: MUS 130
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

MUSC B4B Elementary Theory
3 units
Prerequisites: Successful completion of MUSC B4A or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: A study of common practice harmony. Chromatic harmony from secondary dominants through augmented sixth chords including simple form analysis and modulation.
Hours: 54 lecture
C-ID: MUS 140
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

MUSC B4C Intermediate Theory-Contemporary Materials
3 units
Prerequisites: Successful completion of MUSC B4B or equivalent with a grade of C or better.
Corequisite: MUSC B15C must be taken concurrently.
Recommended: BC placement into reading level 06.
Description: Study of compositional styles and practices of Western art music since the late 19th century including practical application in composition: Covers advanced chromaticism, impressionism, serialism, basic set theory, and jazz harmony.
Note: Not open to students who have taken the equivalent course MUSC B4D. Formerly MUSC B4D.
Hours: 54 lecture
C-ID: MUS 150
Transferable: UC, CSU and private colleges

MUSC B5A Class Piano
1 unit
Recommended: BC placement into reading level 06 and writing level 06.
Description: Beginning study of piano. Includes instruction in note reading, technical exercises, and repertoire study. Intended for students preparing to teach in the elementary grades and for music majors specializing in voice or instruments, other than the piano.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE C.1
MUSC B5B Class Piano
1 unit
Prerequisites: Successful completion of MUSC B5A with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Continuing study of piano beyond beginning level (MUSC B5A). Includes instruction in elementary keyboard theory, technical exercises, and repertoire study. Intended for students preparing to teach in the elementary grades and for music majors specializing in voice or instruments, other than the piano.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE C.1

MUSC B6A Class Voice
1 unit
Recommended: Basic understanding of music fundamentals.
Description: Elementary solo vocal training. Emphasizes breath control, tone placement, posture, diction, and interpretive concepts.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE C.1

MUSC B6B Class Voice
1 unit
Prerequisites: Demonstration by audition of skill of at least MUSC B6A level.
Description: Solo voice training. Emphasizes repertoire and further technical development beyond the level of MUSC B6A.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE C.1

MUSC B6C Class Voice
1 unit
Prerequisites: Demonstration by audition of skill of at least MUSC B6B level.
Description: Solo voice training. Emphasizes repertoire and further technical development beyond the level of MUSC B6B.
Hours: 54 lab
Transferable: UC, CSU and private colleges

MUSC B6D Class Voice
1 unit
Prerequisites: Demonstration by audition of skill of at least MUSC B6C level.
Description: Solo vocal training. Emphasizes repertoire and further technical development beyond the level of MUSC B6C.
Hours: 54 lab
Transferable: UC, CSU and private colleges

MUSC B7 Applied Music
1 unit
Prerequisite: Enrollment open only to students who pass a qualifying audition.
Corequisites: Must be concurrently enrolled in a music ensemble (MUSC B10A, MUSC B12A, MUSC B13A or MUSC B14A) Must be concurrently enrolled in one of the following music theory/ear training course combinations or have completed the entire sequence with a grade of 'C' or better in each course: MUSC B2, MUSC B4A/B15A, MUSC B4B/B15B, or MUSC B4C/B15C.
Description: Individual and group instruction in solo performance for music majors culminating in a juried performance final. Includes instruction in technique, repertoire, and performance practice. Designed for students with significant prior experience/instruction with a particular instrument or singing.
Hours: 54 lab
Repeat: 3
C-ID: MUS 160
Transferable: UC, CSU and private colleges

MUSC B5A Beginning Class Guitar
1 unit
Prerequisites: Successful completion of MUSC B5A or equivalent with a grade of C better or demonstrated skill of at least MUSC B5A level as determined by the instructor.
Description: A guitar course in sequence designed to teach the student how to play the guitar. Correct right and left hand technique, how to read guitar music, basic chords, finger-picking, scales, arpeggios, slurs, bar chords, and strumming. A suitable acoustic guitar is required.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE C.1

MUSC B5B Intermediate Class Guitar
1 unit
Prerequisites: Successful completion of MUSC B5A or equivalent with a grade of C better or demonstrated skill of at least MUSC B5A level as determined by the instructor.
Description: Intermediate techniques of guitar playing. Emphasizes advanced chord positions, scales, arpeggios, slurs, and bar chords. A suitable acoustic guitar required.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE C.1

MUSC B10A Concert Band
1 unit
Prerequisites: Audition required.
Description: Rehearsal and performance of standard band literature: Participation in public performances such as concerts, assemblies, and additional rehearsals is required. Field trips required.
Hours: 54 lab
Repeat: 3
C-ID: MUS 180
Transferable: UC, CSU and private colleges; BC GE C.1

MUSC B12A College Orchestra
1 unit
Prerequisites: Audition required.
Corequisite: MUSC B4C and MUSC B230C must be taken concurrently.
Description: Performance of standard works from the orchestra literature. An audition and field trips are required for this course.
Hours: 54 lab
Repeat: 3
C-ID: MUS 180
Transferable: UC, CSU and private colleges; BC GE C.1

MUSC B13A Jazz Ensemble
1 unit
Prerequisites: Audition required.
Recommended: BC placement into reading level 06.
Description: Practical experience working in various instrumental combinations and styles in the jazz tradition. Training in jazz literature, phrasing, ensemble playing, musicality, and creative improvisation leading to public performances on and off campus.
Hours: 54 lab
Repeat: 3
C-ID: MUS 180
Transferable: UC, CSU and private colleges; BC GE C.1
**MUSC B14A College Choir**
1.5 units  
Prerequisites: Audition required.  
Description: Study of major choral literature of all the historical periods. Public performance required for credit. Field trips for performances are required.  
Hours: 81 lab  
Repeat: 3  
C-ID: MUS 180  
Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B15A Ear Training and Sight Singing**
1 unit  
Corequisite: MUSC B4A and MUSC B230A.  
Description: Drill in the singing and recognition of intervals, scales, and melodies with solfège syllables using moveable do. Practice in conducting rhythmic, harmonic, and melodic dictation. Practice in conducting and performing rhythms.  
Hours: 54 lab  
C-ID: MUS 145  
Transferable: UC, CSU and private colleges

**MUSC B15B Ear Training and Sight Singing**
1 unit  
Prerequisites: Successful completion of MUSC B15A or equivalent with a grade of C or better.  
Corequisite: Concurrent enrollment in MUSC B4B and MUSC B230B.  
Description: This course applies and develops the rhythmic, melodic, and harmonic materials of MUSC B4B Elementary Theory through ear training, sight singing, analysis, and dictation.  
Hours: 54 lab  
C-ID: MUS 155  
Transferable: UC, CSU and private colleges

**MUSC B15C Intermediate Ear Training and Sight Singing**
1 unit  
Prerequisites: Successful completion of MUSC B15B with a grade of C or better.  
Corequisite: MUSC B4C and MUSC B230C must be taken concurrently.  
Description: Aural skill training in chromatic, post-tonal, and jazz oriented materials including exercises in singing, rhythm performance/conducting, keyboard, dictation (melodic, rhythmic, and harmonic), and scale/mode/chord aural recognition.  
C-ID: MUS 155  
Hours: 54 lab  
Transferable: UC, CSU and private colleges

**MUSC B17A Chamber Singers**
1.5 units  
Prerequisites: Audition required.  
Description: A select choral group, specializing in rehearsal and performance of all choral literature for all historical periods. Public performance required for credit. Field trips for performances are required.  
Hours: 81 lab  
Repeat: 3  
C-ID: MUS 180  
Transferable: UC, CSU and private colleges; BC GE C.1

**MUSC B18A Drum Line**
1-3 units  
Prerequisites: Audition required.  
Description: Rehearsal and performance of drum line literature suitable for field, parade, and competition. Field trips and performances required.  
NOTE: 54 hours of lab for each unit of credit. MUSC B18A has a limit of 3 repeats.  
Hours: 54 lab hours for each 1 unit (54-162)  
Repeat: 3  
Transferable: UC, CSU and private colleges

**MUSC B21A History of Music**
3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: Historical survey of western music from the Greco-early Christian era to the present. Uses recorded music and musical scores to study changing musical styles.  
Hours: 54 lecture  
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**MUSC B21B History of Music**
3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: Historical survey of western art music from the music of Beethoven to the present. Uses recorded music and musical scores to study changing musical styles.  
Hours: 54 lecture  
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**MUSC B22 Music Appreciation**
3 units  
Recommended: BC placement into reading level 06.  
Description: Introduction to appreciation of music with an emphasis on Western art music: historical development is surveyed with recordings, videos, multi-media computer presentations, and live performances as illustrations for directed listening as a basis for appreciation.  
Hours: 54 lecture  
C-ID: MUS 100  
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

**MUSC B23 Appreciation of Jazz**
3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: Comparative survey of jazz styles, musicians, and representative works. Students learn core musical concepts, engage in directed listening activities, attend live concerts, and discuss the various theoretical, aesthetic, and philosophical ideas that inspire the creation of jazz music.  
Hours: 54 lecture  
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1
MUSC B24 A Survey of World Music
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: An introductory course surveying the dominant musical cultures of the new and non-western world with comparisons to European/western music. Emphasizes listening to and participation in world music through lecture, films, recording, live presentations, and class performance.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.1; BC GE C.1

MUSC B27 History of Rock and Roll
3 units
Recommended: BC placement into reading level 06.
Description: Introduction to the historical and stylistic developments of rock music, with emphasis on its social, economic and political consequences.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

MUSC B28 Drum and Bugle Corps
2 units
Prerequisites: Audition required.
Description: Rehearsal and performance of drum corps literature suitable for field, parade, and competition. Field trips and performances required.
Hours: 108 lab
Repeat: 3
Transferable: CSU and private colleges.

MUSC B30 Introduction to Music Technology
3 units
Recommended: BC placement into reading level 06.
Description: This course introduces the basics of how technology and music interact. There will be an emphasis on audio software and hardware, basic principles of sound, digital audio workstations, MIDI, synthesis, and sequencing. Particular attention will be paid toward making connections between analog and digital technological contexts. Lab activity consists of self-directed projects which make use of software and hardware found in the typical digital audio studio.
Hours: 54 lecture
Repeat: 3
Transferable: CSU and private colleges.

MUSC B31 Commercial Music Composition
3 units
Recommended: BC placement into reading level 06.
Description: This course explores the process of songwriting and commercial music composition. Songs and compositions will be analyzed on chord structure, form, rhythm, melody, harmony, and lyrics. Original compositions and performances are expected from all students. Emphasis on the development of musical and lyrical skills. Students will analyze harmonic, melodic, and rhythmic components of popular songs from a range of genres. Emphasis will be placed on relevant repertoire and the composition and performance of original material. Additional emphasis on commercial music composition for multimedia applications (jingles, production music, soundtracks). Includes use of basic recording technology useful for the contemporary songwriter.
Hours: 54 lecture
Transferable: CSU and private colleges.

MUSC B32 Sound Design and Synthesis
3 units
Prerequisites: Successful completion of MUSC B30 with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: This course introduces and builds up properties of sound and how it functions acoustically and electronically. There will be an emphasis on digital and analog synthesis, sampling, MIDI sequencing, film sound design, and other multimedia applications. Crucial to this exploration are considerations of the widespread use of sound synthesis and design in entertainment industry. The course culminates with a sound design reel and portfolio consisting of original electronic music compositions, multimedia applications, and sound design treatments.
Hours: 36 lecture 54 lab
Transferable: CSU and private colleges.

MUSC B33 Live Sound
3 units
Prerequisites: Successful completion of MUSC B30 with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Introduction to live sound systems and aspects of reinforcement and acoustical design. Emphasis on components and function of live sound systems including microphones, mixers, effects, power amplifiers, and speaker systems. Focus on setup, operation, maintenance, safety, health, and other workplace issue. Student will gain hands-on experience at local venues and/or events with opportunities to troubleshoot, sound check, and mix in live sound situations.
Hours: 54 lecture
Transferable: CSU and private colleges.

MUSC B34 Recording Techniques I
3 units
Prerequisites: Successful completion of MUSC B30 with a grade of C or better.
Description: This course covers the fundamental aspects of work in the modern recording studio. Emphasis on commonalities between project and professional studio contexts. Topics include microphone technique, recording consoles, signal chain, signal processors, patchbays, monitoring, mastering, producing, and synchronization.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

MUSC B35 Recording Techniques II
3 units
Recommended: Successful completion of MUSC B30 and B34 with a grade of C or better, and BC placement into reading level 06.
Description: This course builds upon the fundamental aspects covered in Recording Techniques I. Emphasis on mixing, mastering, advanced automation techniques, production techniques, film sound synchronization.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.
MUSC B36 Music Business
3 units
Recommended: BC placement into reading level 06.
Description: An overview of the music industry including publishing, music merchandising, contracts and licenses, retail concerns, and live entertainment. Additional examination of duties and responsibilities of producers, agents, managers, promoters, and performing artists. Emphasis on new media marketing and exposure to diverse careers and streams of income within industry. Students build portfolio in preparation for career in music industry.
Hours: 54 lecture
Transferable: CSU and private colleges.

MUSC B37 Commercial Music Ensemble
1 unit
Prerequisite: Audition required.
Description: Participation in small ensemble concentrating on popular styles, improvisation, and other aspects of commercial music performance.
Hours: 54 activity
Repeat: 3
Transferable: CSU and private colleges; BC GE C1

MUSC B40 Renegade Marching Band
2 units
Prerequisites: Previous experience in a marching band or similar ensemble required.
Description: Rehearsal and performance of marching band literature suitable for field, parade, and competition. Field trips and performances may be required.
Hours: 108 lab
Repeat: 3
Transferable: Not transferable. Degree applicable.

MUSC B54A College Chorale
1 unit
Prerequisite: Previous experience in a choral group and demonstrated proficiency.
Recommended: BC placement into reading level 06.
Description: Select choral ensemble of mixed voices specializing in the rehearsal and performance of major choral works. Repertoire is selected from choral literature of all periods. Field trips for performances are required.
Hours: 54 lab
Repeat: 3
Transferable: Not transferable. Not degree applicable.

MUSC B230A Music Lab
0.5 unit
Description: A computer-based, positive attendance course featuring self-pacing programmed system instruction in one of two self-directed music technology areas: reading, transcribing, and performing rhythmic, harmonic, and melodic elements of music and/or generating, manipulating editing, and producing digital audio content by gaining experience with digital audio workstations (DAWs). Offered on a Pass/No Pass basis.
Hours: 27 lab
Transferable: Not transferable. Not degree applicable.

NRES - Natural Resources Management Courses

NRES B1 Range Management
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Basic range management and improvement practices. Proper utilization of rangeland resources. Overview of multiple use principles. Maintenance and improvement of range plant communities. Field trips required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

NRES B2 Parks and Outdoor Recreation
3 units
Description: An exploration of national, state, county, city, and private park systems. An overview of the history, philosophy, policy and principles of the formation, administration and functioning of recreational facilities and their impact on America. Field trips may be required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

NURS - Registered Nursing Courses

NURS B20 Fundamentals of Nursing
4 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: Level 1 course introduces the concepts of the professional nurse, nursing skills, beginning leadership, health care environment, growth and development across the lifespan, basic physiologic and human needs in health and illness, and providing a safe environment. Beginning critical thinking skills are emphasized, within the framework of the nursing process.
Correlated clinical experiences are provided with adult patients who have basic health problems with predictable outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are introduced and integrated throughout the course. Hours: 36 lecture, 108 lab
Transferable: CSU and private colleges.

**NURS B21 Medical Surgical Nursing 1**
5 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program
Description: This level 1 course introduces medical surgical nursing concepts and practices as they relate to adult clients across the lifespan. Using the nursing process as the framework, the student will begin to recognize alterations in function or illness, and formulate age appropriate nursing interventions. Correlated clinical experiences are provided with adult patients who have basic health problems with predictable outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are introduced and integrated throughout the course.

Materials Fee: $24.00
Hours: 45 lecture, 135 lab
Transferable: CSU and private colleges.

**NURS B22 Pharmacology**
3 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 1 course provides the foundation knowledge base related to pharmacology in nursing, including both theoretical and mathematical aspects. Course uses the nursing process as the framework, and addresses the roles of provider of care, manager of care, and member of the profession. Fundamental principles of pharmacodynamics, pharmacokinetics, legal and ethical issues, and nursing responsibilities are covered. Information regarding intravenous drug administration is limited to pharmacokinetics. The drug classes most commonly used in clinical practice are presented. Additionally, information regarding basic mathematical calculations related to medication administration is introduced.

Hours: 54 lecture
Transferable: CSU and private colleges.

**NURS B23 Medical Surgical Nursing 2**
4.5 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program
Description: This Level 2 course focuses on the development of the knowledge base and skills to care for patients across the lifespan, in various settings, who have higher acuity and more complex nursing needs. The nursing process is the framework for identification and treatment of health problems, and other concerns. Correlated clinical experiences emphasize clinical decision making, patient care management, including prioritization of care, and development of psychomotor skills. Leadership and management knowledge and skills are integrated in both the theory and clinical components. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated throughout the course.

Materials Fee: $24.00
Hours: 45 lecture, 108 lab
Transferable: CSU and private colleges.

**NURS B24 Obstetrics - Maternity Nursing**

3 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 2 course provides a foundation for theoretical and technical knowledge base while caring for the contemporary family centered childbirth. Parent/newborn issues are viewed from a nursing process approach for the antepartum, intrapartum, postpartum, and neonatal client. Correlated clinical experiences emphasize clinical decision making, patient care management, including prioritization of care, and development of psychomotor skills. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components.

Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

**NURS B25 Mental Health Psychiatric Nursing**
3.5 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 2 course provides an introduction to Psychiatric Mental Health Nursing, using the nursing process as the framework to promote psychosocial integrity within the context of the health illness continuum across the life span. Emphasis is on therapeutic interactions and communications, bio-psychosocial rehabilitation and therapeutic use of self. Correlated clinical experiences will provide opportunities for students to participate in therapeutic activities in a variety of mental health settings. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components.

Hours: 36 lecture, 81 lab
Transferable: CSU and private colleges.

**NURS B26 Medical Surgical Nursing 3**
5.5 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: Level 3 course focuses on the application of previously learned knowledge as well as the development of more in-depth knowledge for adult clients across the lifespan who have more diverse and complex disease states. The nursing process is the framework used in this course to present topics, such as leadership, critical thinking, pharmacology and safety. Correlated clinical experiences are provided with adult patients who have increasingly complex outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated and analyzed throughout the didactic and clinical experiences.

Materials Fee: $24.00
Hours: 45 lecture, 162 lab
Transferable: CSU and private colleges.

**NURS B27 Pediatric Nursing**
3.5 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 3 course provides a foundation for pediatric nursing using growth and development concepts as a framework for presenting problems and special concerns of the pediatric client. Communication, anticipatory guidance, response to hospitalization, legal and ethical issues and health care of pediatric clients are discussed. Correlated clinical experiences emphasize clinical decision making, patient care management,
including prioritization of care, and development of psychomotor skills. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components.

Hours: 27 lecture, 108 lab
Transferable: CSU and private colleges.

NURS B28 Medical Surgical Nursing 4
7 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 1 course introduces medical surgical nursing concepts and practices as they relate to adult clients across the lifespan. Using the nursing process as the framework, the student will begin to recognize alterations in function or illness, and formulate age appropriate nursing interventions. Correlated clinical experiences are provided with adult patients who have basic health problems with predictable outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are introduced and integrated throughout the course.
Materials Fee: $24.00
Hours: 36 lecture, 108 lab
Transferable: CSU and private colleges.

NURS B29 Gerontology - Community Nursing
2 units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 1 course provides the foundation knowledge base related to pharmacology in nursing, including both theoretical and mathematical aspects. The course uses the nursing process as the framework, and addresses the roles of provider of care, manager of care, and member of the profession. Fundamental principles of pharmacodynamics, pharmacokinetics, legal and ethical issues, and nursing responsibilities are covered. Information regarding intravenous drug administration is limited to pharmacokinetics. The drug classes most commonly used in clinical practice are presented. Additionally, information regarding basic mathematical calculations related to medication administration is introduced.
Hours: 54 lecture
Transferable: CSU and private colleges.

NURS B42 Pharmacology for Nursing Practice
3 Units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 1 course introduces medical surgical nursing concepts and practices as they relate to adult clients across the lifespan. Using the nursing process as the framework, the student will begin to recognize alterations in function or illness, and formulate age appropriate nursing interventions. Correlated clinical experiences are provided with adult patients who have basic health problems with predictable outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are introduced and integrated throughout the course.
Materials Fee: $24.00
Hours: 36 lecture, 108 lab
Transferable: CSU and private colleges.

NURS B43 Nursing Care of the Medical Surgical Patient 2
5.5 Units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 2 course focuses on the development of the knowledge base and skills to care for patients across the lifespan, in various settings, who have higher acuity and more complex nursing needs. The nursing process is the framework for identification and treatment of health problems, and other concerns. Correlated clinical experiences emphasize clinical decision making, patient care management, including prioritization of care, and development of psychomotor skills. Leadership and management knowledge and skills are integrated in both the theory and clinical components. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated throughout the course.
Materials Fee: $24.00
Hours: 45 lecture, 162 lab
Transferable: CSU and private colleges.

NURS B44 Nursing Care of the Psychiatric-Mental Health Client
3 Units
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: This Level 2 course provides an introduction to Psychiatric Mental Health Nursing, using the nursing process as the framework to promote psychosocial integrity within the context of the health illness continuum across the life span. Emphasis is on therapeutic interactions and communications, biopsychosocial rehabilitation and therapeutic use of self. Correlated clinical experiences will provide opportunities for students to participate in therapeutic activities in a variety of mental health settings. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components.

Hours: 27 lecture, 81 lab  
Transferable: CSU and private colleges.

**NURS B45 Transition to Registered Nursing**  
2 Units  
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.  
Description: This Level 3 course designed for the LVN who is pursing licensure as an RN or the RN who wants to update skills to re-enter the workforce. The focus is on the development of critical thinking skills, physical assessment, the nursing process, role transition, and clinical skill competencies. The roles of provider of care, manager of care, and member of the profession are integrated throughout the course. The lab correlates with the didactic portion and provides an opportunity for application of concepts in the Nursing Skills lab.  
Hours: 27 lecture, 27 lab  
Transferable: CSU and private colleges.

**NURS B46 Nursing Care of the Medical Surgical Patient 3**  
5 Units  
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.  
Description: This level 3 course focuses on the application of previously learned knowledge as well as the development of more in-depth knowledge for adult patients across the lifespan who have more diverse and complex disease states. The nursing process is the framework used in this course to present topics, such as leadership, critical thinking, pharmacology and safety. Correlated clinical experiences are provided with adult patients who have increasingly complex outcomes. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated and analyzed throughout the course. The lab correlates with the didactic portion and provides an opportunity for application of concepts in the Nursing Skills lab.  
Materials Fee: $24.00  
Hours: 45 lecture, 135 lab  
Transferable: CSU and private colleges.

**NURS B47 Nursing Care of Maternal Newborn Patients**  
3 Units  
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.  
Description: This Level 3 course provides a foundation for theoretical and technical knowledge base while caring for the contemporary family centered childbirth. Parent/newborn issues are viewed from a nursing process approach for the antepartum, intrapartum, postpartum, and neonatal client. Correlated clinical experiences emphasize clinical decision making, patient care management, including prioritization of care, and development of psychomotor skills. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components.  
Hours: 27 lecture, 81 lab

**NURS B48 Nursing Care of Children and Adolescents**  
3 Units  
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.  
Description: This Level 3 course provides a foundation for Nursing Care of Children and Adolescents using growth and development concepts as a framework for presenting problems and special concerns of the pediatric client. Communication, anticipatory guidance, response to hospitalization, legal and ethical issues and health care of pediatric clients are discussed. Correlated clinical experiences emphasize clinical decision making, patient care management, including prioritization of care, and development of psychomotor skills. The roles of Provider of Care, Manager of Care, and Member of the Profession are integrated in both the theory and the clinical components. Admission to the Associate Degree Nursing Program and appropriate standing in the Nursing Program are required.  
Hours: 27 lecture, 81 lab  
Transferable: CSU and private colleges.

**NURS B48WE Occupational Work Experience Education**  
1-8 units  
Prerequisite: Declared major or occupational goal and evaluation of student’s qualifications and objectives.  
Description: College credit for registered nursing related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.  
Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).  
Transferable: CSU and private colleges.

**NURS B49 Nursing Care of the Medical Surgical Patient 4**  
7 Units  
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.  
Description: This Level 4 capstone course focuses on the integration of knowledge and skills, though analysis and synthesis. The nursing process is used as the framework for providing nursing care to patients who have critical and complex medical conditions. Correlated clinical experiences emphasize refinement of clinical decision-making, formulating and revising priorities of care; psychomotor skills and patient care management. The roles of Provider of Care, Manager of Care, and Member of Profession are integrated to promote success in transitioning from student to entry level Registered Nurse.  
Materials Fee: $24.00  
Hours: 45 lecture, 243 lab  
Transferable: CSU and private colleges.

**NURS B70 Role Transition: Bridging Nursing Theory to Practice**  
2 units  
Prerequisites: LVN or RN licensure and Limitation on Enrollment, Appropriate standing in the Associate Degree Nursing Program.  
Description: Prerequisite: LVN or RN licensure. This Level 3 course is designed for the LVN who is pursing licensure as an RN or the RN who wants to update skills to re-enter the workforce. The
focus is on the development of critical thinking skills, physical assessment, the nursing process, role transition, and clinical skill competencies. The roles of provider of care, manager of care, and member of the profession are integrated throughout the course. The lab correlates with the didactic portion and provides an opportunity for application of concepts in the Nursing Skills lab.

Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

NURS B201A Learning Lab
1 unit
Prerequisites: Enrollment into the ADN or LVN program or nursing student with evaluation of skills and knowledge by the ADN Program Director.
Description: An on-campus lab designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level 1 course provides instructional guidelines to assist students to refine newly acquired skills and develop the competency level expected of entry level nurses. Multimedia and computer assisted instructional materials which support the semester learning objectives are available. Subsequent enrollment in additional semesters will offer the student an opportunity for additional skill and competency development within the subject matter.
Note: Offered credit/no credit grading only. Open entry/open exit. Formerly NURS B201L.
Hours: 36 lecture
Transferable: Not transferable. Not degree applicable.

NURS B201B Learning Lab
1 unit
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: An on-campus lab designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level 2 course builds upon content from level one curriculum and provides instructional guidance to assist students to refine newly acquired skills and develop the expected competencies for level two students.
Note: open entry/open exit
Hours: 54 lab
Transferable: Not transferable. Not degree applicable.

NURS B201C Learning Lab
1 unit
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: An on-campus lab designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level three course builds upon content from level two curriculum and provides instructional guidance to assist students to refine newly acquired skills and develop the expected competencies for level two students.
Note: open entry/open exit
Hours: 54 lab
Transferable: Not transferable. Not degree applicable.

NURS B201D Learning Lab
1 unit
Prerequisites: Appropriate standing in the Associate Degree Nursing Program.
Description: An on-campus lab designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level four course builds upon content from all previous levels of the curriculum and provides instructional guidance to assist students to refine newly acquired skills and develop the competency level expected of entry level nurses.
Note: open entry/open exit
Hours: 54 lab
Transferable: Not transferable. Not degree applicable.

NUTR - Nutrition Courses

NUTR B10 Elementary Nutrition
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Basic concepts and principles of nutrition with application to current nutrition issues. Emphasizes improvement of personal health through proper eating habits.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

NUTR B50 Modified Diets
2 units
Prerequisites: Successful completion of NUTR B10 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Nutrition care for acute illnesses and chronic diseases. Related normal and abnormal physiology, nutrition assessment and care plans and client education techniques are emphasized. Field trips may be required.
Hours: 36 lecture
Transferable: Not transferable. Degree applicable.

ORNH - Ornamental Horticulture Courses

ORNH B1 Introduction to Ornamental Horticulture
3 units
Description: General course in environmental horticulture with emphasis on nursery operations, landscaping, turf management, and floral industries including; basic botany, cultural practices, propagation, structures and layout, pest management, planting, container gardening and houseplants, floral design, plant identification, turf grass installation and care, and survey of
career opportunities. Lab required. Field trips required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ORNH B2 Fundamentals of Nursery Management and Plant Production
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This is an introductory class in nursery business operations, skills, and processes appropriate to the horticulture industry in California. Emphasis will be placed upon laws/regulations, record keeping, budgeting, computer skills, professional organizations, cooperatives, merchandising, salesmanship, and communications. Propagation media, nursery designs, propagation, structures, seedage, cuttage, plant structure, rooting aids, transplanting, stepping up, and potting will be covered.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ORNH B3 Landscape Installation and Maintenance
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Enhancing the function and aesthetic value of public and private landscapes by applying appropriate installation and maintenance techniques in Kern County and California. Topics include: sustainability, planting, pruning, watering, soil fertility, pest management, weed control, and landscape maintenance business practices. Lab required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ORNH B4 Plant Propagation
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Principles of sexual propagation, seedage, and asexual propagation, budding, grafting, cuttings, layering, division and separation. Principles of tissue culture.
Hours: 36 lecture, 54 lab
C-ID: AG+EH 116
Transferable: CSU and private colleges.

ORNH B6 Ordnamental Plant Identification-Ground Covers, Vines, and Dwarf Shrubs
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Identification, habits of growth, culture and landscape use of dwarf shrubs, vines, ground covers, annuals, and seasonal plants, adapted to the Central Valley of California and the surrounding regions. Covers those plants best observed and studied in the fall of the year. Plant materials from local regions will also be included. Plants emphasized will come from the current California Association of Nurseries & Garden Centers (CANGC) and Professional Landcare Network (PLANET) Certification Tests Plant Lists. Lab required. Field trips required.
Hours: 36 lecture, 54 lab
C-ID: AG+EH 108
Transferable: UC, CSU and private colleges

ORNH B7 Ornamental Plant Identification-Large Shrubs, Small Trees, Large Trees, and Palms
3 units
Description: Identification, habits of growth, culture and landscape use of large shrubs, small trees, large trees and palms adapted to the Central Valley of California and the surrounding mountains. Field trips required.
Hours: 36 lecture, 54 lab
C-ID: AG+EH 112
Transferable: UC, CSU and private colleges

ORNH B8 Introduction to Landscape Design
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: The study and implementation of the art and science of landscape design, including principles of design, the design process, drafting, graphics, and presentation methods. Project emphasis is placed upon residential and small commercial sites. Course includes introduction to computer landscape design software programs. Lab required.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges.

ORNH B36 Beginning Floral Design
3 units
Recommended: BC placement into reading level 06.
Description: Introduction to the fundamentals of theory, techniques and skills currently practiced in the floral industry. Includes applied art principles, cut flower care, handling practices, proper use of florist tools and materials, pricing of floral products and use of current floral business technology. Includes constructing corsages, floral arrangements, and foliage plant items, which meet floral industry standards.
Hours: 36 lecture, 54 lab
Transferable: CSU and private colleges; BC GE C.1

ORNH B48WE Occupational Work Experience Education
1-8 units
Recommended: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for ornamental horticultural related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60 - 480). Paid 75 hours for each 1 unit (75 - 600).
Transferable: CSU and private colleges.
OSRM - Occupational Safety and Risk Management Courses

OSRM B10 Occupational Safety
3 Units
Description: This course explores the theories and principles of occupational safety with emphasis on the evaluation and control of workplace safety hazards including physical and mechanical hazards and their associated regulatory framework. Risk identification and hazard assessment provide a foundation for determining best practices for controlling unsafe conditions and practices. Topics include accident causation, accident investigation, job safety analysis, facility safety and inspection, machine guarding, enclosed and confined spaces, forklifts and industrial trucks, workplace violence, and the role of personal protective equipment.
Hours: 54 lecture
Transferable: Not transferable, Degree applicability pending.

OSRM B12 Occupational Health
3 Units
Description: Exploration of the concepts of occupational health as they pertain to appraising and controlling health hazards and occupational diseases. Specific chemical, biological, and physical agents found in the workplace, and their applicable regulatory standard, will be discussed including bloodborne pathogens, ergonomics and human factors engineering, indoor air quality, mold, noise, heat illness, health effects of pesticides, and others. Discussion of techniques for recognition, evaluation, prevention and control of occupational health hazards.
Hours: 54 lecture
Transferable: Not transferable, Degree applicability pending.

OSRM B16 Managing Employee Safety and Health
3 Units
Description: An examination of the fundamental elements of managing an occupational safety and health program. This course includes discussion of the legal aspects and regulatory framework for managing work-related injuries, cause and control of occupational loss, medical surveillance programs including commercial drivers, occupational drug and alcohol testing programs and requirements, disability discrimination parameters and reasonable accommodation. Application of a work management matrix outlining the major phases of employment including pre-employment identification of essential functions and job hazards will also be discussed.
Hours: 54 lecture
Transferable: Not transferable, Degree applicability pending.

OSRM B18 Occupational Regulations and Regulators
3 Units
Description: Overview of the state and local regulatory agencies involved in occupational safety and health and the scope of their jurisdiction, subject matter, and enforcement structure. Legal aspects including the employer's responsibilities, employee rights, and citation/fine applicability will be explored. Special emphasis on the Cal/OSHA regulatory framework and enforcement. The following additional agencies will also be discussed: California Department of Industrial Relations; California Department of Pesticide Regulation; California Department of Toxic Substances Control; Division of Oil, Gas, and Geothermal Resources; and others. Local regulatory agencies and their role/jurisdiction will also be addressed.
Hours: 54 lecture
Transferable: Not transferable, Degree applicability pending.

PBHS - Public Health

PBHS B20 Introduction to Public Health
3 units
Description: This course provides an introduction to the discipline of Public Health. Students will gain an understanding of the basic concepts and terminologies of public health, as well as the history and accomplishments of public health officials and agencies. The course will provide an overview of the functions of various public health professions and institutions, and an in-depth examination of the core public health disciplines. Topics will include epidemiology of infectious and chronic disease; prevention and control of diseases in the community including the analysis of the social determinants of health and strategies for eliminating disease; illness and health disparities among various populations; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management.
C-ID: PHS 101
Hours: 54 lecture
Transferable: CSU and private colleges.

PBHS B21 Personal Health and Wellness
3 units
Description: This course focuses on the exploration of major public health issues and behaviors within the dimensions of health. Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors with a focus on community wellness and behavioral change. Topics include nutrition, exercise, weight control, mental health, stress management, violence, substance abuse, reproductive health, disease prevention, aging, healthcare, and environmental hazards and safety.
C-ID: PHS 100
Hours: 54 lecture
Transferable: CSU and private colleges.

PBHS B22 Drugs, Health, and Society
3 units
Description: This course provides an overview of the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Students will be introduced to the concept of substance abuse and dependence, the definition of licit and illicit drugs, and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. The course will explore and discuss the political, social and economic factors involved in the supply and demand for drugs. The course will cover epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. as well as risk factors associated with the use and abuse of these substances. Coursework will include a survey of current options for drug addiction recovery, as well as, available resources to support prevention and intervention of drug addiction.
C-ID: PHS 103
Hours: 54 lecture
Transferable: CSU and private colleges.

**PHED B23 Health and Social Justice**
3 units
Prerequisites: BC placement into reading level 06 or writing level 06 or successful completion of ENGL B50 or ACDV B50 or equivalent with a grade of C or better.
Description: This course provides an introduction to the health inequities in the United States that stem from unequal living and health conditions. Students will explore how education, socioeconomic status, racism and gender shape health epidemics and policy development. The course will provide the basic skills necessary for advocating for health and social justice, as well as provide the theoretical concepts on health disparities and the relationship with social justice.
C-ID: PHS 102
Hours: 54 lecture
Transferable: CSU and private colleges.

## PHED - Physical Education Courses

**PHED B1A Educational Planning for College Athletes**
1 unit
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Designed to assist student athletes in understanding college matriculation, educational plans, and collegiate transfer requirements. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College.
Hours: 18 lecture
Transferable: Associate Degree Only. Not transferable.

**PHED B2SB Aquatics: Beginning Swimming**
1 unit
Description: A semester course in beginning swimming in which the focus is on the knowledge and skill necessary to handle the body with ease in the water. The course covers basic mechanical, physiological and psychological concepts, fundamental safety skills and basic swimming strokes for the 4 competitive swimming strokes. (Free, Back, Breast, Fly)
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

**PHED B3ADP Adaptive Physical Education**
1 unit
Description: Individualized fitness class for the physically challenged (as verified by D.S.P.S.) with activities designed to emphasize resistive circuit training combined, when possible, with aerobic training.
Note: Students who are physically challenged may contact DSPS to determine if they qualify to enroll in the course again.
Justification must be documented by a DSPS counselor.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 54 lab
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

**PHED B6A Coeducational and Individual Activity: Archery**
1 unit
Description: Archery as a lifelong physiological and social activity. An elementary course in archery to include target archery and field archery.
Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

**PHED B6BB Coeducational and Individual Activity: Basketball**
1 unit
Description: Basketball as a lifelong physiological, psychological and social activity. Skills, strategies, rules and etiquette of basketball.
Note: UC campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

**PHED B6BLB Coeducational and Individual Activity: Beginning Ballet (DANC B6BLB)**
1 unit
Description: Co-educational beginning ballet course. Includes warm-up exercises, technical skills and terminology.
Note: Not open to students who have completed DANC B6BLB.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

**PHED B6FCX Coeducational and Individual Activity: Fitness Center**
1 unit
Description: Circuit training with resistance machines (weights), supplemented with a variety of aerobic based equipment. Stresses the development of muscle mass/tone, endurance and cardiovascular fitness. Not recommended for competitive weight lifters.
Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

**PHED B6G Coeducational and Individual Activity: Golf**
1 unit
Description: This course includes instruction in technique, tactics, and physical conditioning related to the sport of golf.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

**PHED B6JD Coeducational Team and Individual Activity: Jazz Dance (DANC B6JD)**
1 unit
Description: Fundamental Jazz techniques and fundamental terminology of ballet as they relate to jazz dancing; including warm-up exercises for the preparation of the human body as an instrument for dance. Different styles and rhythms of jazz dance and music for jazz dance will be introduced. Note: Not open to students who have completed DANC B6JD.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

PHED B6SC Coeducational and Individual Activity: Soccer
1 unit
Description: Soccer as a lifelong physiological, psychological and social activity. Training in the fundamental skills of soccer. Understanding of the rules of the game, safety and basic strategy of play.
Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

PHED B6T Coeducational and Individual Activity: Tennis
1 unit
Description: Tennis as a lifelong physiological, psychological and social activity. Student will learn basic tennis skills, rules, strategies and etiquette.
Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

PHED B6V Coeducational and Individual Activity: Beginning Volleyball
1 unit
Description: An elementary course in volleyball to include instruction in techniques, tactics, and physical conditioning related to the sport of volleyball.
Note: UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.
Hours: 54 lab
Transferable: UC, CSU and private colleges; BC GE E

PHED B6WT Coeducational and Individual Activity: Weight Training
1 unit
Description: Coeducational course stressing correct application of weight training principles used with “free weights.” Instruction in the correct and safe use of “free weights” to develop strength, endurance and general conditioning.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 54 lab
Repeat: 1
Transferable: UC, CSU and private colleges; BC GE E

Athletic Code Eligibility Requirements
An athlete must be continuously enrolled in a minimum of 12 units during the season of competition. Students competing in a sport must successfully complete 24 units to be eligible for a second season of competition. A 2.0 grade point average must be maintained to be eligible to participate.

NOTE: All intercollegiate sports may be substituted for physical education requirement for graduation. UC campuses give a maximum of four semester units of credit for appropriate physical education activity courses.

PHED B10 Intercollegiate Competition for Men: Football
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Men's Football team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B11 Intercollegiate Competition for Men: Basketball
1.5 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Men's Basketball team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 81 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B12 Intercollegiate Competition: Track and Field
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for the Track and Field team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B13 Intercollegiate Competition for Men: Tennis
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Men's Tennis team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E
PHED B14 Intercollegiate Competition for Men: Baseball
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Men's Baseball team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B15 Intercollegiate Competition Cheer
1 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Practice, participation and competition on cheer, dance and stunt teams for Bakersfield College. Includes development of skills, both individual and group, for successful public performance. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 36 lab
Repeat: 3
Transferable: Not transferable.

PHED B16 Intercollegiate Competition for Men: Golf
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Men's Golf team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B17 Intercollegiate Competition Cross Country
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for the Cross Country team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B20 Intercollegiate Competition for Men Wrestling
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Men's Wrestling team. Student must meet athletic code eligibility requirements. Field trips may be required. UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B23 Intercollegiate Competition for Women Soccer
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Women's Soccer team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B23M Intercollegiate Competition for Men Soccer
3 units
Prerequisite: Limitation on Enrollment: Student must meet athletic code eligibility requirements.
Description: Intercollegiate competition for Men's Soccer team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: Pending transferability. BC GE E

PHED B24 Intercollegiate Competition for Women: Golf
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Women's Golf team. Student must meet athletic code eligibility requirements. Field trips may be required.
Note: UC Campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B25 Intercollegiate Competition for Women Volleyball
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Women's Volleyball team. Student must meet athletic code eligibility requirements. Field trips may be required. UC campuses give a maximum of four semester units of credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B25B Intercollegiate Competition for Women Beach Volleyball
3 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate competition for Women's Beach Volleyball. Student must meet athletic code eligibility requirements. Field trips may be required. UC Campuses give a maximum of four semester units credits for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: Pending transferability. BC GE E
PHED B28 Intercollegiate Competition for Women: Basketball
1.5 units
Prerequisites: Limitation on Enrollment, this class is designed for
identified student athletes.
Description: Intercollegiate competition for Women’s Basketball
team. Student must meet athletic code eligibility requirements.
Field trips may be required.
Note: UC Campuses give a maximum of four semester units of
credit for Physical Education activity units.
Hours: 81 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B29 Intercollegiate Competition for Women Softball
3 units
Prerequisites: Limitation on Enrollment, this class is designed for
identified student athletes.
Description: Intercollegiate competition for Women’s Softball
team. Student must meet athletic code eligibility requirements.
Field trips may be required.
Note: UC Campuses give a maximum of four semester units of
credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B32 Shape Up
3 units
Description: An integration of physiological, psychological and
sociological understandings of the human being in relationship
to physical activity as a lifelong pursuit. Topics include
physical fitness, stress reduction benefits of exercise, nutrition,
socialization and individual differences in human behavior.
Note: UC Campuses give a maximum of four semester units of
credit for Physical Education activity units.
Hours: 18 lecture, 108 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B33 Intercollegiate Swimming
3 units
Prerequisite: Limitation on Enrollment, Must meet athletic code
eligibility requirement
Description: Intercollegiate competition for Swimming. Student
must meet athletic code eligibility requirements. Field trips may
be required.
Note: UC Campuses give a maximum of four semester units of
credit for Physical Education activity units.
Hours: 162 lab
Repeat: 3
Transferable: UC, CSU and private colleges; CSU GE E; BC GE E

PHED B34C Intercollegiate Conditioning
1 unit
Description: Intercollegiate athletics course emphasizing
preseason conditioning. Enrollment is limited to athletic team
candidates and includes, sport specific aerobic and anaerobic
conditioning, drill technique, strength conditioning, speed
development and game play. Students who repeat this course
will improve skills and fitness through further instruction and
practice.
Note: UC Campuses give a maximum of four semester units of
credit for Physical Education activity units.
Hours: 54 lab
Repeat: 3
Transferable: UC, CSU and private colleges.

PHED B34WT Intercollegiate Weight Training
0.5–2 units
Prerequisites: Limitation on Enrollment, this class is designed for
identified student athletes.
Description: Intercollegiate athletics course emphasizing weight
training. Enrollment is limited to athletic team candidates
and includes, sport specific aerobic and anaerobic weight
training, appropriate technique, strength conditioning, speed
development and explosive exercises. Students who repeat this
course will improve strength, flexibility, and fitness through
detailed instruction and practice.
Note: UC Campuses give a maximum of four semester units of
credit for Physical Education activity units.
Hours: 81 lab
Repeat: 3
Transferable: UC, CSU and private colleges

PHED B36 First Aid and CPR
3 units
Recommended: BC placement into reading level 06.
Description: This course involves the theory and detailed
demonstration of the first aid care of the injured. The student
will learn to assess a victim’s condition and incorporate proper
treatment. Standard first aid, C.P.R. and AED certification(s) will
be granted upon successful completion of requirements.
Materials Fee: $27.00
Hours: 54 lecture
C-ID: KIN 101
Transferable: UC, CSU and private colleges; BC GE E

PHED B39A Prevention and Care of Athletic Injuries
3 units
Recommended: Successful completion of BIOL B32 and BIOL B33
with a grade of C or better and Recommended: BC placement into
reading level 06 and writing level 06.
Description: An introduction to the field of sports medicine.
Evaluation, rehabilitation and prevention of athletic injuries.
Major emphasis will be on prevention of injuries and performance
enhancement, through pre-screening for potential biomechanical
deficiencies, strength training, conditioning, flexibility, nutrition
and proper hydration techniques. The instructor will properly
advise students who take this course of limitations and proper
skills applications. Field trip required.
Hours: 36 lecture, 54 lab
Transferable: UC, CSU and private colleges

PHED B39B Advanced Athletic Training
3 units
Recommended: Successful completion of BIOL B32 and BIOL B33
with a grade of C or better.
Description: Evaluation and rehabilitation of athletic injuries;
exposure to various physical therapy modalities and prevention
of injuries will be discussed. The athletic trainer will properly
advise students who take this course of limitations and proper
skills applications. Field trip required.
Hours: 36 lecture, 54 lab
Transferable: UC, CSU and private colleges
PHED B41 Recreation Leadership
3 units
Description: Survey of employment opportunities in the field of recreation. Students will learn the meaning and scope of recreation leadership, the problems of organization, types of activities and elements of leadership.
Hours: 54 lecture
Transferable: CSU and private colleges.

PHED B42 Introduction to Kinesiology
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This course is an introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of the sub-disciplines in kinesiology will be discussed along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions.
C-ID: KIN 100
Hours: 54 lecture
Transferable: CSU and private colleges.

PHED B50 Intercollegiate Conditioning
1 unit
Description: Pre-season intercollegiate athletics. Enrollment is limited to athletic team candidates and includes, sport specific aerobic and anaerobic conditioning, drill technique, strength conditioning, speed development and game play. Students who repeat this course will improve skills and fitness through further instruction and practice.
Hours: 54 activity
Repeat: 3
Transferable: Not transferable. Not degree applicable.

PHED B53 Intercollegiate Weight Training
.5 – 2 units
Prerequisites: Limitation on Enrollment, this class is designed for identified student athletes.
Description: Intercollegiate athletics course emphasizing weight training. Enrollment is limited to athletic team candidates and includes, sport specific aerobic and anaerobic weight training, appropriate technique, strength conditioning, speed development and explosive exercises. Students who repeat this course will improve strength, flexibility, and fitness through detailed instruction and practice.
Hours: 27 – 108 activity
Not degree applicable. Not transferable.

PHIL - Philosophy Courses

PHIL B6A Introduction to Philosophy
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A method, problems, multicultural and historical approach to philosophy. Epistemology (the study of knowledge), metaphysics (the study of reality), ethics (the study of morality), and philosophy of religion are covered from both traditional Western and non-Western sources.
Hours: 54 lecture
C-ID: PHIL 100
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

PHIL B7 Introduction to Logic
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Traditional basics of correct reasoning with an emphasis on their relationships to language, thought and argument.
Hours: 54 lecture
C-ID: PHIL 110
Transferable: UC, CSU and private colleges; CSU GE A.3; BC GE B.2

PHIL B9 Critical Thinking and Advanced Composition
3 units
Prerequisites: Successful completion of ENGL B1A or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Development of critical thinking skills necessary for evaluating and formulating argumentative/persuasive essays, and practice in applying those skills.
Hours: 54 lecture
C-ID: PHIL 120
Transferable: UC, CSU and private colleges; IGETC 1.B; CSU GE A.3; CSU GE C.2; BC GE B.2

PHIL B10 Introduction to Ethics
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Examination of the philosophical approach to morality. Study of the meaning of ethics and morality and methods used in ethical theorizing and reasoning. Emphasizes major ethical issues and theories. Discusses how to set up an ethical system.
Hours: 54 lecture
C-ID: PHIL 120
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

PHIL B12 Ethics of Living and Dying
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A philosophical yet practical approach to some of the major medical-ethical problems facing human beings today, such as: what patients should be told, the nature and importance of informed consent, the meaning and criteria for living, dying, and death including caring for the dying, and allowing to die, mercy killing. Permeating these problems will be a study of the basis for ethical relationships among human beings through a study of what morality is, consequentialist and nonconsequentialist theories of morality, and how to set up an ethical system. Special emphasis will be placed on the relationship of the professional and the well to the sick, dying, and bereaved.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; CSU GE C.2; CSU GE E; BC GE C.2

PHIL B18 History of Ancient Philosophy
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A survey of the development of Western philosophy from the Pre-Socratic to the Hellenistic philosophers with particular emphasis on the philosophies of Plato and Aristotle. The focus throughout will be on analyzing and evaluating the central arguments of these philosophers as well as understanding how their views have contributed to the subsequent development of philosophy, science, art, and literature.

Hours: 54 lecture
C-ID: PHIL 130
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

PHIL B37 Introduction to World Religions
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A survey of three Western religions - Judaism, Christianity, and Islam, and three Eastern Religions - Confucianism, Hinduism and Buddhism. Examines each religions history, sacred scriptures, geographic dispersion, primary theological concepts and spiritual practices, and contemporary role. Emphasis on understanding the distinct belief and practice of an individual in each of these religious traditions.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

PHIL B100 Industry Ethics
3 units
Prerequisites: Admission to Industrial Automation Bachelor’s Degree program
Description: The main objective of this course is to stress analytical reasoning and emphasize clear thinking regarding the application of major ethical theories to specific workplace, organizational, and global business and technological issues that students are most likely to encounter once in the workforce. An examination of the responsibilities of the employee, manager, and organization within an industry context will take place, highlighting such issues such as whistleblowing, environment (e.g., asset disposal program), discrimination and harassment, risk, and safety. A key component of the class will also discuss the ethical importance of emerging technologies and their impact on society.
Hours: 54 lecture
Transferable: Bachelor’s Degree Applicable

PHYS - Physics Courses

PHYS B2A General Physics-Mechanics and Heat
4 units
Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better.
Corequisites: MATH B1A (may be taken concurrently)
Description: The properties of matter, mechanics and heat. Emphasizes understanding laws, principles, and theories. Required for most science, premedical, most other pre-professional and technical majors.
Hours: 54 lecture, 54 lab
C-ID: PHYS 105
Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

PHYS B2B General Physics-Sound, Light, Electricity, Magnetism, Modern Physics
4 units
Prerequisites: BC placement into math level 06 or successful completion of Math B1B or equivalent and PHYS B2A or equivalent with a grade of C or better.
Description: The second in a 2-course algebra/trigonometry-based general physics sequence required of many science, pre-medical, and other pre-professional and technical majors. Includes electricity and magnetism, geometrical and physical optics, quantum physics, atomic physics, nuclear physics, and relativity. Emphasizes principles, laws, and problem solving.
Hours: 54 lecture, 54 lab
C-ID: PHYS 110
Transferable: UC, CSU and private colleges

PHYS B4A Mechanics and Wave Motion
4 units
Prerequisites: Successful completion of MATH B6A or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06 or and writing level 06.
Description: The first in a sequence of three semester courses required of physics, engineering, and other majors requiring a thorough physics background. Includes vectors, kinematics, dynamics, momentum, energy, rotation, gravitation, oscillations, fluids, and wave motion.
Hours: 54 lecture, 54 lab
C-ID: PHYS 205
Transferable: UC, CSU and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

PHYS B4B Heat, Electricity, Magnetism
4 units
Prerequisites: PHYS B4A and MATH B6B with grades of ‘C’ or better.
Recommended: Successful completion of MATH B6C with a grade of ‘C’ or better.
Description: Second of a three-course calculus-based physics sequence required of physics, engineering, and
other majors requiring a thorough physics background. Includes thermodynamics, electricity, magnetism, AC circuits, electromagnetic oscillations, and electromagnetic radiation. Emphasizes principles, laws and problem-solving.

Hours: 54 lecture, 54 lab
C-ID: PHYS 210
Transferable: UC, CSU and private colleges

**PHYS B4c Optics and Modern Physics**
4 units
Prerequisites: Successful completion of PHYS B4B or equivalent and MATH B6B or equivalent with grades of C or better.
Description: Third of a three-course calculus-based physics sequence required of physics, engineering, and other majors requiring a thorough physics background. Includes geometric and physical optics, relativity, quantum physics, quantum mechanics, atomic and molecular physics, and nuclear physics. Emphasizes principles, laws, and problem solving.

Hours: 54 lecture, 54 lab
C-ID: PHYS 215
Transferable: UC, CSU and private colleges

**POLS - Political Science Courses**

**POLS B1 American Government: National, State and Local**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: A study of American government with emphasis on the national government. Includes a comprehensive analysis of governmental structure, functions, principles and problems. Includes analysis of California state and local governments. Partially satisfies the requirements in U.S. Constitution, American history and institutions and California state and local government.

Hours: 54 lecture
C-ID: POLS 110
Transferable: UC, CSU and private colleges; IGETC 4.H; CSU GE D.8; BC GE D.2; BC GE D.3

**POLS B2 Comparative Government**
3 units
Recommended: Successful completion of ENGL B50 with a grade of C or better, and BC placement into reading level 06.
Description: A comparative analysis of government structures and the underlying economic, social, and cultural systems of the principal nations of the industrial world: United States, United Kingdom, France, Federal Republic of Germany, Russia, and Japan. Additional emphasis on certain nations in sensitive geographic area or countries whose size and developing economies make them important, such as the People’s Republic of China, Brazil, Mexico, Iran, India and Nigeria.

Hours: 54 lecture
C-ID: POLS 130
Transferable: UC, CSU and private colleges; IGETC 4.H; CSU GE D.8; BC GE D.2

**POLS B3 International Politics**
3 units
Recommended: BC placement into reading level 06.
Description: Surveys the dynamics and ideologies of present-day international politics and rivalries. Development of the national state system and the evolution of the techniques and arts of diplomacy, and the causes of war.

Hours: 54 lecture
C-ID: POLS 140
Transferable: UC, CSU and private colleges; IGETC 4.H; CSU GE D.8; BC GE D.2

**POLS B5 Current Issues/American Government**
1-2 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Study of special current events, such as elections, impeachments, proceedings, public policies, or Constitutional revisions.
Note: Offered only as such events occur.
Hours: 18 lecture hours for each unit (18-36)
Transferable: CSU and private colleges

**POLS B12 Contemporary Issues in California State and Local Government**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Analysis of the role of state and local governments, with special emphasis directed toward the history and development of these institutions; the state and local political environment; political parties, interest group, citizen and media inputs; current problems and changing functions affecting local governments. Partially satisfies the requirements in U.S. Constitution, American history and institutions.

Hours: 54 lecture
Transferable: CSU and private colleges; CSU GE D.8; BC GE D.2; BC GE D.3

**POLS B16 Vital Political Problems**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Examination of major political problems challenging the United States today. Emphasis on class discussion and individual analysis of controversial topics involving political policy in the context of the study of political science.

Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 4.G; IGETC 4.H; CSU GE D.8; BC GE D.2

**PSYC - Psychology Courses**

**PSYC B1A General Psychology**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Emphasis is on the scientific process and research methods employed in psychology. Biological, developmental, cognitive, and sociocultural theories are covered to explain psychological phenomena. Psychological disorders and the
evolving corresponding treatment protocols are applied to a diversity of individuals and groups.
Hours: 54 lecture
C-ID: PSY 110
Transferable: Transferable: UC, CSU and private colleges; IGETC 4.J; CSU GE D.9; CSU GE E; BC GE D.1; BC GE E

**PSYC B1B Biological Psychology**
3 units
Prerequisite: PSYC B1A with a grade of ‘C’ or better.
Recommended: BC placement into reading level 06 and writing level 06.
Description: Ethical standards and current research methodologies for studying brain behavior relationships and mental processes in all life forms. Emphasis placed on using empirical analysis to understand and solve problems related to mechanisms underlying neural conduction and synaptic transmission, sensory and perceptual systems, plasticity, and brain damage, development, learning and memory, hunger, sex, drug use, sleep, lateralization of function and psychological disorders. Designed for psychology majors planning for upper division work in psychology.
Hours: 54 lecture
C-ID: PSY 150
Transferable: UC, CSU and private colleges; IGETC 5.B; CSU GE B.2; BC GE B.1

**PSYC B5 Elementary Statistics for the Behavioral and Social Sciences**
4 units
Prerequisites: BC placement into math level 04 or successful completion of MATH B65 or B70 or equivalent with a grade of C or better.
Description: Emphasis on the use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings to various disciplines. Not open to students who have successfully completed BEHS B5.
Note: Not open to students who have successfully completed BEHS B5.
Hours: 72 lecture
C-ID: SOCI 125
Transferable: UC, CSU and private colleges; IGETC 2.A; CSU GE B.4; BC GE B.2

**PSYC B6 Research Methods for the Behavioral and Social Sciences**
4 units
Prerequisites: Successful completion of PSYC B1A and PSYC B5 or equivalent with a grade of C or better.
Description: Emphasis is on behavioral and social science research processes and methods including: problem definition and hypothesis formation, research design, ethical treatment of participants, data collection and analysis, application of statistical software, and professional report writing. Students will collect and analyze data from both experimental and non-experimental research methods.
Hours: 72 lecture
C-ID: PSY 200
PSYC B40 Introduction to Lifespan Psychology  
3 units  
Recommended: BC placement into reading level 06 and writing level 06.  
Description: Provides an overview, from a psychological perspective, of human development from conception through death, including biological and environmental influences. Biopsychosocial development and cognitive and physical changes are examined in light of historical and contemporary research and theory for the growing child, adolescent, and adult.  
Hours: 54 lecture  
C-ID: PSY 180  
Transferable: UC, CSU and private colleges; IGETC 4.G; IGETC 4.I; CSU GE D.7; CSU GE D.9; CSU GE E; BC GE D.1

PSYC B100 Industrial and Organizational Psychology  
3 units  
Prerequisites: Admission to Industrial Automation Bachelor's Degree program  
Description: The application of psychological principles and theories to the workplace: This includes an introduction to the methods, practices, research, and theories necessary to the scientific study of the attitudes and behaviors of employees and employers; interpersonal relationships in the workplace; the structure of organizations and organizational policies; the complex processes of motivation and leadership; individual and organizational performance; and the match between people and jobs.  
Hours: 54 lecture  
Transferable: Bachelor's Degree Applicable

RADT - Radiologic Technology Courses

RADT B1A Introduction to Radiologic Technology  
2 units  
Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better and admission to the Radiologic Technology Program.  
Description: Orientation to the duties and responsibilities of the Radiologic Technologist. Emphasizes the medical use of radiation, interpersonal communication, ethics, radiation safety and protection, foundations and futures of medicine and radiology, hospital and departmental operations, professional development and quality assurance. Assistance in understanding program requirements.  
Hours: 36 lecture  
Transferable: CSU and private colleges.

RADT B1B Patient Care  
2 units  
Prerequisites: Successful completion of BIOL B18 or equivalent with a grade of C or better and admission to the Radiologic Technology Program.  
Description: Introduction to the basic concepts of patient care in the field of radiography. Instruction and demonstration in aseptic and non-aseptic techniques, infection control, body mechanics, transfer and immobilization techniques, vital signs, oxygen therapy administration, medical emergencies, and contrast media.  
Hours: 36 lecture  
Transferable: CSU and private colleges.

RADT B2A Radiographic Anatomy and Positioning 1  
3 units  
Prerequisites: Successful completion of RADT B4A and RADT B1B.  
Description: Instruction and lab practice in radiographic positioning of the chest, abdomen, lower and upper extremities, arthrography, bone surveys and bone densitometry with correlated imaging anatomy.  
Hours: 36 lecture, 54 lab  
Transferable: CSU and private colleges.

RADT B2B Radiographic Anatomy and Positioning 2  
3 units  
Prerequisites: Successful completion of RADT B2A and RADT B3A and RADT B4B with a grade of C or better.  
Description: Instruction and lab practice in radiographic positioning of the vertebral column, bony thorax, gastrointestinal, biliary and urinary systems with correlated film anatomy.  
Hours: 36 lecture, 54 lab  
Transferable: CSU and private colleges.

RADT B2C Radiographic Anatomy and Positioning 3  
3 units  
Prerequisites: Completion of second summer session of Radiologic Technology Program  
Description: Instruction and lab practice in radiographic positioning of the head and skull with correlated film anatomy. Introduction to the principles of mammography, angiography and interventional imaging with correlated anatomy.  
Hours: 36 lecture, 54 lab  
Transferable: CSU and private colleges.

RADT B3A Radiographic Principles 1  
3 units  
Prerequisites: Successful completion of RADT B1A with a grade of C or better.  
Description: The principles of radiographic image production and acquisition including tube construction, exposure factors, beam restriction, grids, scatter radiation, image receptors, image processing, sensitometry and digital imaging will be discussed.  
Hours: 36 lecture, 54 lab  
Transferable: CSU and private colleges. Degree applicable.

RADT B3B Radiographic Principles 2  
3 units  
Prerequisites: Successful completion of RADT B3A and RADT B12 with a grade of C or better.  
Description: The principles of radiographic image production, acquisition and analysis including receptor exposure, contrast, spatial resolution, distortion, exposure control systems, mobile radiography, and fluoroscopy will be discussed.  
Hours: 36 lecture, 54 lab  
Transferable: CSU and private colleges.

RADT B4A Introduction to Clinical Education  
1.5 units  
Prerequisites: Successful completion of BIOL B18 or BIOL B32 or BIOL B33 with a grade of C or better and acceptance to the Radiologic Technology Program.  
Description: Introduction to clinical education includes job
shadowing and observation in patient transportation techniques, image processing, patient registration, equipment orientation, general patient care and safety.
Materials Fee: $44.00
Hours: 81 lab
Transferable: CSU and private colleges.

**RADT B4B Clinical Education 1**
4 units
Prerequisites: Successful completion of RADT B4A with a grade of C or better.
Description: Supervised clinical experiences are provided to develop skills in basic radiographic procedures. Fundamentals of anatomy, positioning and technical factors for imaging quality, radiation safety and protection.
Materials Fee: $20.00
Hours: 240 lab
Transferable: CSU and private colleges.

**RADT B5 Radiation Physics**
3 units
Prerequisites: Acceptance to the Radiologic Technology Program. Recommended: Prerequisites:  BC placement into reading level 06.
Description: Fundamentals of physics, radiologic quantities and units, the atom, electromagnetic radiation, electricity and magnetism, x-ray equipment, x-ray production, filtration, x-ray interaction with matter, radiation protection and quality assurance.
Hours: 72 lecture, 18 lab
Transferable: CSU and private colleges.

**RADT B6 Clinical Education 2**
5 units
Prerequisites: Successful completion of RADT B4B with a grade of C or better.
Description: Supervised clinical experiences provided to perfect skills in a variety of radiographic procedures. Case studies of radiographic procedures discussing the fundamentals of anatomy, positioning and technical factors of image quality are analyzed. Extension of radiographic procedures demonstrated in RADT B2A, RADT B2B.
Materials Fee: $20.00
Hours: 18 lecture, 216 lab
Transferable: CSU and private colleges.

**RADT B7 Clinical Education 3**
6.5 units
Prerequisites: Successful completion of RADT B2B and RADT B3B and RADT B6 with a grade of C or better.
Recommended:  BC placement into reading level 06.
Description: Supervised clinical experiences provided to perfect skills in a variety of radiographic procedures. Case studies of radiographic procedures discussing the fundamentals of anatomy, positioning and technical factors of image quality are analyzed. Extension of radiographic procedures demonstrated in RADT B2A, B2B.
Materials Fee: $44.00
Hours: 18 lecture, 302 lab
Transferable: CSU and private colleges.

**RADT B9A Sectional Anatomy for Medical Imaging**
3 units
Prerequisites: Acceptance into the radiologic technology program.
Description: Sectional anatomy of the head, spine, thorax, abdomen and pelvis. Emphasis on computed tomography and magnetic resonance images and other imaging modalities using sectional anatomy.
Hours: 54 lecture
Transferable: CSU and private colleges.

**RADT B10 Clinical Education 4**
7 units
Prerequisites: Successful completion of RADT B7 with a grade of C or better.
Description: Supervised clinical experiences are provided in advanced radiographic and fluoroscopic procedures. Case studies of radiographic procedures discussing anatomy, pathology, positioning and technical factors of image quality are analyzed on a case-by-case basis.
Materials Fee: $20.00
Hours: 18 lecture, 324 lab
Transferable: CSU and private colleges.

**RADT B11 Radiographic Pathology**
2 units
Prerequisites: Successful completion of RADT B2C and RADT B5 and RADT B10 with a grade of C or better.
Hours: 36 lecture
Transferable: CSU and private colleges.

**RADT B12 Radiobiology and Radiation Protection**
2 units
Prerequisites: Successful completion of RADT B1A and B4A with a grade of C or better.
Description: Fundamental concepts of radiobiology including interactions of matter, biological effects on living cells and organ systems, radiation quantities and units, filtration, radiation monitoring, ALARA concepts and radiation protection for occupational and non-occupational populations. Review of current related California and Federal health and safety codes.
Hours: 36 lecture
Transferable: CSU and private colleges.

**RADT B13 Clinical Education 5**
6.5 units
Prerequisites: Successful completion of RADT B10 with a grade of C or better.
Description: Supervised clinical experiences are provided to perfect skills in advanced radiographic procedures. Designed to prepare the student for program completion and certification examinations.
Materials Fee: $20.00
Hours: 351 lab
Transferable: CSU and private colleges.

**RADT B30 Principles of Venipuncture**
1 unit
Prerequisites: Current Cardiopulmonary Resuscitation, Healthcare Provider card.
Description: Basic instruction, practice and competency of venipuncture methods and procedures for the administration of contrast agents. Routes of administration, safety, basic
pharmacology, dosage calculations and emergency procedures. Course meets California Health and Safety Code, Section 106985, pertaining to Certified Radiologic Technologists performing venipuncture.

Hours: 18 lecture
Transferable: CSU and private colleges.

**SOCI - Sociology Courses**

**SOCI B1 Introduction to Sociology**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: The scientific study of human social behavior: This assumes that external forces shape individual behavior. The focus of this perspective is to identify, explain, and interpret these forces. As such, essential concepts, research methods, social institutions, and applications essential to the sociological perspective are examined.
Hours: 54 lecture
C-ID: SOCI 110
Transferable: UC, CSU and private colleges; IGETC 4.J; CSU GE D.10; BC GE D.2

**SOCI B2 Problems of Modern Society**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Studies the social problems of modern society, especially in the United States, in order to arrive at alternate methods of identification and measurement of social problems. An attempt to gain understanding by judging the probable results of proposed changes. Problems include deviant behavior, including crime and delinquency, alcoholism, family violence, deviant subcultures, problems of man in industrial society, including the industrial workers and white collar workers and also stress and mental illness.
Hours: 54 lecture
C-ID: SOCI 115
Transferable: UC, CSU and private colleges; IGETC 4.J; CSU GE D.10; BC GE D.2

**SOCI B20 Social Psychology**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Examines the effects of social influence on individual behavior: This includes the study of conformity, obedience, persuasion, attitude formation and attitude change. The role of social judgment, aggression, prejudice, prosocial behavior, attraction, and interpersonal relationships are also examined. The scientific method and research strategies in social psychology are employed. Not open to students who have successfully completed PSYC B20.
Hours: 54 lecture
C-ID: PSY 170
Transferable: UC, CSU and private colleges; IGETC 4.J; PSYC 4.J; CSU GE D.9; CSU GE D.10; BC GE D.1; BC GE D.2

**SOCI B21 Special Projects/Sociology**
1 unit
Recommended: BC placement into reading level 06 and writing level 06 and completion of at least one introductory level sociology course or higher and instructor approval.
Description: Student development and completion of an original sociological research project and/or provide assistance with an existing research project. Course may also include student presentation of research findings.
Hours: 18 lecture
Transferable: CSU and private colleges.

**SOCI B28 Introduction to Gender**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Sociological analysis of the social construction of masculinity and femininity historically and cross-culturally. It examines the debate on sex and gender and analyzes the impact of economic and political change on gender expectation and practices. It focuses macro-analyses on how institutions shape gender and micro-analyses on how individuals are socialized and how they practice gender.
Hours: 54 lecture
C-ID: SOCI 140
Transferable: UC, CSU and private colleges; IGETC 4.D; CSU GE D.3; CSU GE D.4; CSU GE D.10; CSU GE E; BC GE D.2

**SOCI B36 Sociology of the Chicano**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Historical review of the sociocultural and cultural characteristics of Chicanos in the United States. Focus is on the inter-relationships of Chicanos and the society including their immigration history, acculturation, assimilation, minority status and their cultural change, by generation status. Not open to students who have taken the equivalent course, CHST B36.
Hours: 54 lecture

**SOCI B45 Minority Relations**
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Examination of the relationships among dominant and minority groups and related concepts and theories: Review of the immigration of Northwestern Europeans, Southeastern Europeans, Asians, and North and South Americans, and resultant social patterns reflecting their acculturation and structural assimilation. Those experiences unique to African Americans, women, and religious groups are also included. Not open to students who have taken the equivalent course, HMSV B45.
Hours: 54 lecture
C-ID: SOCI 150
SOIL - Soil Science Courses

SOIL B1 Introduction to Soil Science
3 units
Recommended: BC placement into reading level 06, writing level 06, and math level 03.
Description: Core agriculture course; required of all agriculture majors. Problems pertaining to the soil which are important in the profitable production of plants, including physical properties of soils, fertilizers, crop rotation, erosion and salt control, cultivation problems and irrigation.
Hours: 36 lecture, 54 lab
Transferable: UC, CSU and private colleges; BC GE B.1

SPAN - Spanish Courses

SPAN B1 Elementary Spanish I
4 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Introduction to Spanish language and culture by means of a program that involves video, audio, and print media in an integrated method of planned immersion. Students will develop language skills that include reading, writing, listening comprehension and oral production.
Note: Not open to students who have taken the equivalent course, SPAN B1AB.
Hours: 72 lecture
C-ID: SPAN 100
Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.1; BC GE C.2

SPAN B2 Elementary Spanish II
4 units
Prerequisites: Successful completion of SPAN B1 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: This course continues using the “planned immersion approach” begun in SPAN B1. It explores new tenses and moods of the language and continues vocabulary enhancement, development of oral production and writing, integrating aspects of the Spanish culture.
Note: Not open to who have taken the equivalent course, SPAN B2AB.
Hours: 72 lecture
C-ID: SPAN 110
Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

SPAN B3 Intermediate Spanish I
4 units
Prerequisites: Successful completion of SPAN B2 or SPAN B2AB or equivalent with a grade of C or better or Native Speaker.
Recommended: BC placement into reading level 06.
Description: Intensive grammar review of the Spanish language, supplemented with reading selections of Spanish and Latin American authors with the purpose of nourishing an understanding of the Spanish culture.
Note: Not open to students who have successfully completed SPAN B35.
Hours: 72 lecture
C-ID: SPAN 200
Transferable: UC, CSU and private colleges; IGETC 3.B; IGETC 6.A; CSU GE C.2; BC GE C.2

SPAN B4 Intermediate Spanish II
4 units
Prerequisites: Successful completion of SPAN B3 or SPAN B35 or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Continued advanced readings from Spanish and Latin American authors, and continued intensive grammar review of the Spanish language preparing students for upper division work in literature and language. Note: Not open to students who taken the equivalent course, SPAN B36.
Hours: 72 lecture
C-ID: SPAN 210
Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

SPAN B35 Spanish for Heritage Speakers I
4 units
Recommended: Heritage speaker or near heritage speaker abilities and skills.
Description: This course is designed for students whose native language is Spanish but need to improve their writing, grammar, vocabulary, and spelling skills. Strong emphasis will be placed on punctuation, accent rules, composition, grammar, vocabulary and reading. The course is taught entirely in Spanish.
Note: Not open to students who taken the equivalent course, SPAN B3.
Hours: 72 lecture
C-ID: SPAN 220
Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

SPAN B36 Spanish for Heritage Speakers II
4 units
Prerequisite: SPAN B35 with a grade of ‘C’ or better.
Description: This course is a continuation of Spanish B35 and is designed for students whose native language is Spanish but need to improve their academic skills in the language. This course will focus on advanced grammar concepts, subjunctive tenses, sequence of tenses, extensive writing and reading. The writing and reading skills will be strengthened as well as vocabulary building. The course is taught entirely in Spanish.
Note: Not open to students who taken the equivalent course, SPAN B4, or who have taken SPAN B10.
Hours: 72 lecture
C-ID: SPAN 230
Transferable: UC, CSU and private colleges; IGETC 6.A; CSU GE C.2

SPST - Special Studies Courses

SPST B48 Special Studies: Honors
0.5-2 units
Description: Study and projects planned to provide an enriched academic experience for students not being served in regularly scheduled courses. It is planned to meet the needs of superior students whose background and interests indicate that they
could profit from study and projects in a subject area. The course will be designed according to the subject field's studies. Field trips may be required. 
Hours: 9 lecture hours for .5 unit (9-36)
Transferable: CSU and private colleges.

**SPST B49 Special Studies: Honors**
0.5-2 units
Description: Seminars and/or individual conferences by arrangement. Independent, individual study planned to provide an enriched academic experience for students not being served in regularly scheduled courses. Meets the needs of superior students whose background and interests indicate that they could profit from individual study in a subject area. The course will be designed according to the subject field studies, i.e. Special Studies/German. Field trips may be required.
Hours: 9 hours for .5 unit (24-96)
Transferable: CSU and private colleges

**SPST B49L Special Studies Lab: Honors**
1-2 units
Description: Seminars and/or individual conference by arrangement. Independent, individual study planning to provide an enriched academic experience for students not being served in regularly scheduled courses. It is planned to meet the needs of superior students whose background and interests indicate that they could profit from individual study in a subject area. The course will be designated according to the subject field of studies, i.e. Special Studies/German. Field trips may be required.
Hours: 54 hours for 1 unit (54-108)
Transferable: CSU and private colleges

**SPST B201 Special Projects and Studies**
1-3 units
Description: Special projects of studies in an area not being served by regularly scheduled courses. Students are required to meet periodically with a faculty advisor to review progress in the study program. Field trips may be required.
Hours: 18 lecture hours for unit (18-54)
Transferable: Not transferable. Not degree applicable.

**SPST B201L Special Projects and Studies**
1-3 units
Description: Special projects of studies in an area not being served by regularly scheduled courses. The student is required to meet periodically with faculty advisor and/or department chair to review progress in the study program. Maximum 6 units. Field trips may be required.
Hours: 54 hours for 1 unit (54-162)
Transferable: Not transferable. Not degree applicable.

**STDV - Student Development Courses**

**STDV B1 Educational Planning**
1 unit
Description: The course introduces college survival skills and issues, including college expectations, a student's responsibility for education, college resources, and academic policies. This course is designed to assist students in discussing strategies for choosing a major and/or career and to help them in making educational plans based on their individual career goal. AA/AS Associate's Degree applicable.
Hours: 18 lecture
Transferable: CSU and private colleges.

**STDV B2 Lifelong Learning and Career Planning**
2 units
Description: This survey course is designed to increase academic motivation and career success throughout the lifespan. In particular, students will learn to examine how an individual's psychological, social, and environmental factors impact academic, career and personal life choices. Through this exploration, students will apply these topics as they relate to their personal and professional self-development and to the discovery of many new options for improving all aspects of their lives. The historical view of careers, current career trends, and employment outlook will be studied. Various methods of researching academic and career opportunities will be explored to assist students. Satisfies the 0.5 educational planning graduation requirement for Bakersfield College.
Hours: 36 lecture
Transferable: CSU and private colleges.

**STDV B3 Career, Life, and Educational Planning**
3 units
Description: This course guides students through a decision-making process that will help them envision and plan for a future that is productive, achievable, and stimulating. The culmination of this process is the development of a career and educational plan that will create a pathway for students to reach their career and academic goals. Critical thinking skills will be utilized through a systematic approach to career development by examining values, interests, skills, life roles, personality types, personal self-management, decision-making and goal-setting throughout the life span. Satisfies the 0.5 unit educational planning graduation requirement for graduation from Bakersfield College.
Hours: 54 lecture
Transferable: CSU and private colleges; CSU GE E

**STDV B6 Tools for College Success**
3 units
Description: Integrates personal growth, learning techniques, academic and career success, problem solving, critical, and creative thinking. The course focuses on the following topics: self-evaluation and assessment, goal setting, career decision making, educational planning, time and financial management techniques, instructor-student relationships, cultural diversity, stress management, campus resources, learning styles and strategies including lecture note-taking, test taking, memory and concentration. Satisfies 0.5 unit educational planning graduation requirement for graduation from Bakersfield College.
Hours: 54 lecture
Transferable: CSU and private colleges; CSU GE E; BC GE E
TECM - Technical Mathematics Courses

TECM B52 Industrial Math and Quality Control
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Elementary course in mathematics commonly used in industry. Topics covered include a review of arithmetic, percentages, elementary algebra, and geometric forms. Students will also be introduced to precision measurement and the application of statistical quality control (SQC) in industry.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

THEA - Theatre Arts Courses

THEA B1 Introduction to Acting
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Designed for either theatre majors, or, non-majors. Emphasizes mastery of self as the key to creative process of communication and performance through improvisation, theatre games, concentration, pantomime, etc.
Hours: 54 lecture
C-ID: THTR 151
Transferable: UC, CSU and private colleges; CSU GE C.1; BC GE C.1

THEA B2A Elements of Acting
3 units
Prerequisites: Successful completion of THEA B1 or equivalent with a grade of C or better or by audition.
Recommended: BC placement into reading level 06.
Description: This course is an exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process as it relates to scripted materials such as monologues, scenes and full plays.
Hours: 54 lecture
C-ID: THTR 152 (For taking both THEA B2A and THEA B2B)
Transferable: UC, CSU and private colleges; CSU GE C.1; BC GE C.1

THEA B2B Elements of Acting
3 units
Prerequisites: Successful completion of THEA B1 and THEA B2A or equivalent with a grade of C or better or by audition.
Recommended: BC placement into reading level 06.
Description: This class introduces the student to the fundamental concepts and elements of theatre, drama and entertainment by exploring their origins, history, and functions in society as they are experienced and used by individuals.
Hours: 54 lecture
C-ID: THTR 111
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

THEA B12A Introduction to Shakespeare
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: Examination of Shakespeare’s use of verse and prose, imagery, language, developing style, themes, and character development as applied to production concerns. Emphasis is the reading of four representative plays.
Hours: 54 lecture
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

THEA B14 Introduction to Stage Costume
3 units
Description: Students will study costume history, design, and basic construction techniques as an introduction to basic theatrical costuming. Fabrics and their various uses will be investigated.
C-ID: THTR 174
Hours: 54 lecture
Transferable: UC, CSU and private colleges

THEA B16 Stagecraft
3 units
Description: Basic set construction, scenic painting, construction materials, stage properties, tools and equipment, special effects, lighting and sound, stage management.
Hours: 54 lecture
C-ID: THTR 171
Transferable: UC, CSU and private colleges

THEA B20 Introduction to Theatre
3 units
Recommended: BC placement into reading level 06 and writing level 06.
Description: This course is an introduction to the fundamental concepts of theatre, drama and entertainment by exploring their origins, history, and functions in society as they are experienced and used by individuals.
Hours: 54 lecture
C-ID: THTR 191
Transferable: UC, CSU and private colleges; IGETC 3.A; CSU GE C.1; BC GE C.1

THEA B27 Acting Theatre Lab
1-3 units
Prerequisites: Audition required.
Recommended: BC placement into reading level 06.
Description: The rehearsal and production of both main stage and experimental theatre dramas. Theatre activity for the beginner or expert in acting.
Hours: 54 hours for 1 unit (54-162)
Repeat: 3
C-ID: THTR 191
Transferable: UC, CSU and private colleges; BC GE C.1

THEA B28 Technical Theatre Lab
1 unit
Recommended: BC placement into reading level 06 and writing level 06.
Description: Participation in set construction, lighting, makeup, costume, properties, or any other technical area of theatrical productions.
Hours: 54 lab
VNRS - Vocational Nursing Courses

**VNRS B67 Principles of Pharmacology**
2 units
Corequisites: VNRS B68 and VNRS B69 and VNRS B69L and appropriate standing in the Vocational Nursing Program.
Description: This course is designed to prepare the vocational nurse to function safely when administering medication. Using the nursing process as the framework, concepts of pharmacology, calculations, and nursing considerations that pertain to the safe administration of medication are presented.
Hours: 36 lecture
Transferable: Not transferable. Degree applicable.

**VNRS B68 Basic Medical Surgical Nursing Practice**
3 units
Corequisites: VNRS B67 and VNRS B69 and VNRS B69L and appropriate standing in the Vocational Nursing Program.
Description: This Vocational Nursing theory course focuses on the application of the nursing process in common health/illness situations. Using the nursing process as a framework, emphasis is placed on the role of the vocational nurse as a provider of care in assisting the adult and geriatric patient with chronic disorders affecting the GI, GU endocrine, integumentary systems. Topics in basic nutrition are also presented including an overview of basic nutrients, basic therapeutic diets, and patient education specific to chronic conditions. Basic mental health concepts are introduced. Concepts in this course are correlated with the clinical settings presented in Foundations for Vocational Nursing Practice Lab.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

**VNRS B69 Foundations for Vocational Nursing Practice**
3 units
Corequisites: VNRS B67 and VNRS B68 and VNRS B69L and appropriate standing in the Vocational Nursing Program.
Description: This Vocational Nursing theory course begins with an introduction to the roles of the vocational nurse and provides a foundation of basic nursing arts and sciences necessary for the practice of nursing including concepts specific to the gerontological client. Using the nursing process as a framework, concepts of professionalism, growth and development, safety, and health concerns for the adult and geriatric population are discussed. Legal and ethical considerations, cultural diversity, the nursing process, and basic data collection are included as theory topics along with the presentation of basic mental health concepts applicable to the geriatric client. Fundamental nursing skills are discussed in detail with concurrent hands-on practice of skills.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

**VNRS B69L Foundations for Vocational Nursing Practice Lab**
6 units
Corequisites: VNRS B67 and VNRS B68 and VNRS B69 and appropriate standing in the Vocational Nursing Program.
Description: This Vocational Nursing lab course focuses on the provider of care role of the vocational nurse in assisting the adult and geriatric patient to meet essential activities of daily living. A beginning knowledge of nursing techniques and medication administration with an understanding of the principles, rationales, and procedures for each technique is emphasized. Using the nursing process as a framework, students will provide basic care for adult and geriatric patients with various uncomplicated diseases and disorders who require nursing intervention to meet basic human needs. Basic communication techniques for the adult and geriatric client with mental health disorders are integrated throughout. This clinical course includes experiences primarily in long term care clinical settings.
Materials Fee: $24.00
Hours: 324 lab
Transferable: Not transferable. Degree applicable.

**VNRS B79 Intermediate Medical Surgical Nursing**
9 units
Prerequisites: Appropriate Standing in the Vocational Nursing Program and concurrent enrollment in VNRS B79L.
Description: This Vocational Nursing theory course uses the nursing process as a framework to guide the development of critical thinking skills used to determine nursing actions for adult and geriatric patients with cancer and conditions affecting the cardiovascular, lymphatic, musculoskeletal, endocrine, and respiratory system. The role of the vocational nurse as a provider of care and manager of care related to leadership, supervision, and rehabilitation are also discussed. Care of the medical surgical patient with mental health disorders will be integrated. Concepts in this course will be correlated in the various lab settings presented in VNRS B79L (Intermediate Medical Surgical Lab).
Hours: 162 lecture
Transferable: Not transferable. Degree applicable.
VNRS B79L Intermediate Medical Surgical Nursing Lab
6 units
Prerequisites: Appropriate Standing in the Vocational Nursing Program and concurrent enrollment in VNRS B79.
Description: This Vocational Nursing lab course concentrates on the application of the nursing process and the continued development of the manager and provider of care roles for adult medical-surgical patients from various cultural and social backgrounds. Clinical experiences build on the basics of the first semester as students perform more advanced skills when providing nursing care to patients. Incorporated into the course is the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision. This clinical course includes acute care and rehabilitation settings which correlate with the topics presented in VNRS B79 (Intermediate Medical Surgical). Materials Fee: $24.00 Hours: 324 lab Transferable: Not transferable. Degree applicable.

VNRS B83 Critical Thinking and Leadership for the Vocational Nurse
1.5 units
Prerequisite: Appropriate standing in the Vocational Nursing Program.
Corequisite: VNRS B89L
Description: This Vocational Nursing theory course will focus on the concepts of critical thinking skills and clinical reasoning strategies utilizing a case study approach. Leadership skills, capabilities, and knowledge essential to the vocational nurse including roles and responsibilities, application of the nursing process to problem solving methods, and supervision and evaluation of the effectiveness and quality of care are discussed. Managerial traits, styles, roles, and models are also explored. Critical thinking skills and utilization of the nursing process in clinical decision-making will be presented and correlated to the lab setting in VNRS B89L (Advanced Medical Surgical Nursing Lab). Hours: 27 lecture Transferable: Not transferable. Degree applicable.

VNRS B84 Maternal Child Pharmacology
1 unit
Prerequisite: Appropriate standing in the Vocational Nursing Program.
Corequisite: VNRS B88L
Description: This Vocational Nursing theory course will reinforce and emphasize the basic principles of pharmacology and calculations necessary for safe and effective medication administration. The primary focus is on the pharmacology content and variables that influence drug therapy when caring for the child bearing family and the pediatric patient. Utilization of the pharmacological principles from this course will occur in the maternal/child clinical lab course (VNRS B88L Maternal/Child Nursing Lab). Hours: 18 lecture Transferable: Not transferable. Degree applicable.

VNRS B88 Maternal Child Nursing
3 units
Prerequisite: Appropriate standing in the Vocational Nursing Program.
Corequisite: VNRS B88L
Description: This Vocational Nursing theory course provides an overview of contemporary family-centered childbirth and a foundation for pediatric nursing using growth and development concepts as a framework for presenting health problems and special concerns of the pediatric client. This course focuses on the provider and manager of care role for the vocational nurse in assisting families experiencing common health/illness situations associated with their age group. Using the nursing process and developmental theory as a framework, topics and nursing responsibilities for the normal aspects of the child-bearing family and the pediatric client will be discussed. The course concepts will be correlated with the lab setting in VNRS B88L (Maternal/Child Nursing Lab). Hours: 54 lecture Transferable: Not transferable. Degree applicable.

VNRS B88L Maternal Child Nursing Lab
3 units
Prerequisite: Appropriate standing in the Vocational Nursing Program.
Corequisite: VNRS B88
Description: This Vocational Nursing lab course is correlated with the corresponding Maternal/Child Theory course in the Vocational Nursing Program. Using the nursing process and developmental theory as a framework to guide the plan of care, students will provide care for the childbearing family and the pediatric client. This lab course focuses on the advanced application of the nursing process in the care of multiple patients from various ethnic and social backgrounds. Clinical experiences will provide opportunities for the demonstration of leadership skills, capabilities, and knowledge essential to the role of the vocational nurse as a member of the health-care team and supervisor of other vocational nurses and unlicensed health care givers. This clinical course includes setting in acute care, clinics, and Physician offices for obstetric and pediatric patients. Clinical content correlates with VNRS B88 (Maternal/Child Nursing). Hours: 162 lab Transferable: Not transferable. Degree applicable.

VNRS B89 Advanced Medical Surgical Nursing
3.5 units
Prerequisite: Appropriate standing in the Vocational Nursing Program.
Corequisite: VNRS B89L
Description: Using the nursing process as a framework, this Vocational Nursing theory course reinforces the critical thinking skills necessary to care for adult and geriatric patients with acute and complex medical surgical disease states, including multi-system involvement. The care for the patient with increasingly complex mental health conditions will be explored. Role expectations related to being a member of the profession are also discussed. Knowledge of nursing principles and leadership/management techniques to determine and prioritize nursing actions will be correlated with the lab setting presented in VNRS 89L (Advanced Medical Surgical Nursing Lab). Hours: 63 lecture Transferable: Not transferable. Degree applicable.

VNRS B89L Advanced Medical Surgical Nursing Lab
3 units
Prerequisite: Appropriate standing in the Vocational Nursing Program.
Corequisite: VNRS B89
Description: This Vocational Nursing lab course focuses on the advanced application of the nursing process in the care of multiple patients from various ethnic and social backgrounds.
Clinical experiences will provide opportunities for the demonstration of leadership skills, capabilities, and knowledge essential to the role of the vocational nurse as a member of the health-care team and supervisor of other vocational nurses and unlicensed health care givers. Application of critical thinking skills and the utilization of the nursing process in clinical decision making will be assessed. Students will provide care for patients with acute medical surgical illness and families experiencing common health/illness situations. This clinical course includes acute and sub-acute settings which correlate with topics in VNRS 89 (Advanced Medical Surgical Nursing) and VNRS B83 (Critical Thinking and Leadership for the vocational Nurse).

Materials Fee: $24.00
Hours: 162 lab
Transferable: Not transferable. Degree applicable.

WELD - Welding Courses

WELD B1A Introduction to Oxygen Acetylene Welding and Cutting
2 units
Recommended: BC placement into reading level 06.
Description: Properties and characteristics of metals. Safety, theory, and practical experience in oxy-acetylene welding, cutting, and joint design, codes and weld testing.
Materials Fee: $30.00 for project materials.
Hours: 27 lecture, 27 lab
Transferable: CSU and private colleges. Degree applicable.

WELD B1B Introduction to the Welding Processes
2 units
Recommended: BC placement into reading level 06.
Description: Properties and characteristics of metals and a survey of metal welding processes. Safety, theory, and practical experience in shielded metal arc, PAC, MIG, TIG, FCAW, Shear & Brake, joint design, codes and weld testing.
Materials Fee: $30.00 will apply towards steel, welding rods, and welding resume for industry AWS certification.
Hours: 27 lecture, 27 lab
Transferable: CSU and private colleges. Degree applicable.

WELD B48WE Occupational Work Experience Education
1-8 units
Prerequisites: Declared major or occupational goal and evaluation of student's qualifications and objectives.
Description: College credit for Welding related learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational work experience credit may accrue at the rate of 1 to 8 units per semester for a total of sixteen units, and students must work 75 hours per semester unit of paid work experience; 60 hours per semester unit of volunteer work experience. Repetition allowed per Title 5 55253.
Hours: Non-paid 60 hours for each 1 unit (60-480). Paid 75 hours for each 1 unit (75-600).
Transferable: Not transferable.

WELD B53A Shielded Metal Arc Welding
2 units
Recommended: BC placement into reading level 06.
Description: Basic arc welding theory and manipulative skills related to the shielded metal arc welding process, including welding in all positions with various electrodes.
Materials Fee: $30.00
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WELD B53B Shielded Metal Arc Welding 2
2 units
Recommended: Successful completion of WELD B1A and WELD B1B with a grade of C or better and BC placement into reading level 06.
Description: Basic arc welding theory and manipulative skills related to the shielded metal arc welding process, including welding in all positions with various electrodes.
Materials Fee: $30.00
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WELD B54A Blueprint Reading for Welders and Machinists
3 units
Recommended: BC placement into reading level 06.
Description: Principles of blueprint reading as applied to the welding and machine trades. Emphasis will be placed on the ability to visualize and interpret working drawings. Welding symbols and basic shop math are also included.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

WELD B54B Template Development and Layout for the Welder
3 units
Recommended: BC placement into reading level 06.
Description: Technical skills and critical thinking in layout techniques including layout situations, mathematical and pipe fitting terminology used in the industry.
Hours: 54 lecture
Transferable: Not transferable. Degree applicable.

WELD B55A Structural Plate Certification I
2 units
Prerequisites: Successful completion of WELD B53A or WELD B74A with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Safety, introduction to welding codes, welding discontinuities and practical welding. Experience on plate with SMAW or FCAW, based on the American Welding Society DI. 1 structural code. Weld 3/8” plate in 1G, 2G, 3G, & 4G fixed position for certification.
Materials Fee: $30.00
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WELD B55B Structural Plate Certification II
2 units
Prerequisites: Successful completion of WELD B53A or WELD B74A or equivalent with a grade of C or better.
Recommended: BC placement into reading level 06.
Description: Safety, introduction to welding codes, welding discontinuities and practical welding. Experience on plate with SMAW or FCAW, based on the American Welding Society DI. 1 structural code. Weld 1” plate in 1G, 2G, 3G, & 4G fixed position for certification.
Materials Fee: $30.00
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.
WELD B55C ASME Pipe Certification
2 units
Prerequisites: Successful completion of WELD B55A or WELD B55B or equivalent with a grade of C or better or evaluation of students' welding skills and knowledge equivalent to WELD B55A or WELD B55B.
Description: Safety, welding pipe in the 5G rolled, 5G fixed, and 6G fixed positions. An examination of the ASME Welding Code will also be covered.
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WELD B55D ASME Pipe Certification
2 units
Prerequisites: Successful completion of WELD B55A or WELD B55B or equivalent with a grade of C or better or evaluation of students' skills and knowledge equivalent to WELD B55A and WELD B55B.
Description: Safety, welding pipe in the 5G rolled, 5G fixed, and 6G fixed positions. An examination of the ASME Welding Code will also be covered. 5G rolled, 5G fixed, and 6G fixed positions. An examination of the ASME Welding Code will also be covered.
Materials Fee: $30.00
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WELD B55E API and Related Certification Testing
2 units
Prerequisites: Successful completion of WELD B55C or WELD B55D or equivalent with a grade of C or better or evaluation of students' skills and knowledge equivalent to WELD B55C and WELD B55D.
Recommended: BC placement into reading level 06.
Description: Safety, and welding pipe in 5G rolled, 5G fixed and 6G fixed positions. The API 1104 pipe welding code will also be covered. This course prepares students for certification testing.
Materials Fee: $30.00
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WELD B55F API and Related Certification Testing
2 units
Prerequisites: Successful completion of WELD B55C and WELD B55D or equivalent with a grade of C or better or evaluation of student's welding skills and knowledge equivalent to WELD B55C and WELD B55D.
Recommended: BC placement into reading level 06.
Description: Welding safety, and welding pipe in the 5G rolled, 5G fixed, and 6G positions. The API 1104 pipe welding code will also be covered.
Materials Fee: $30.00
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WELD B65AB Welded Steel Structures
3 units
Recommended: Previous class or experience in GMAW (Gas Metal Arc Welding), and BC placement into reading level 06.
Description: Introduction to welded metal fabrication. Safety related to welding and fabrication tools and equipment. Emphasizes layout, cutting, shaping, forming and welding structures together. Calculating material and labor costs will be covered as well. (This course is equivalent to combined WELD 65A and 65B).
Materials Fee: $55.00
Hours: 27 lecture, 81 lab
Transferable: Not transferable. Degree applicable.

WELD B74A Introduction to GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding)
2 units
Recommended: Successful completion of WELD B1B or WELD B53A with a grade of C or better, or one year work experience as a welder and BC placement into reading level 06.
Description: Theory and application of GMAW (Gas, Metal Arc Welding) and FCAW (Flux Core Arc Welding) welding processes. Emphasizes safe and proper operation of these welding processes while welding on mild steel.
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WELD B74B Introduction to Gas Tungsten Arc Welding
2 units
Recommended: Successful completion of WELD B1B or WELD B53A with a grade of C or better, or one year work experience as a welder and BC placement into reading level 06.
Description: Theory and application of GTAW (Gas Tungsten Arc Welding) welding processes. Emphasizes safe and proper operation of this welding process while welding on mild steel, aluminum, and stainless steel.
Note: Not open to students who have taken WELD B74AB.
Materials Fee: $30.00 will apply towards steel, welding rods, and welding resume for industry AWS certification.
Hours: 27 lecture, 27 lab
Transferable: Not transferable. Degree applicable.

WEXP - Work Experience Courses

Registration Instructions: The Work Experience Program offers variable unit classes. Students desiring to enroll in a Work Experience class must go online to the Bakersfield College website, select Program and Classes, click on Work Experience and begin the application process. The six (6) step process must be completed to ensure enrollment in the course. It is the responsibility of the student to complete all the steps in the application process. For more information, please contact the Work Experience Office at 661/395-4580.

WEXP B248 Occupational Work Experience Education - Paid
1-8 units
Prerequisites: Declared major or occupational goal and evaluation by Work Experience department of student's qualifications and objectives.
Description: College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational cooperative work experience credit may accrue at the rate of one to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. Repetition allowed per Title 5, §55253.
Hours: Paid 75 hours per unit (75 – 600)
Transferable: CSU and private colleges.
WEXP B248 Occupational Work Experience Education- Unpaid
1-8 units
Prerequisites: Declared major or occupational goal and evaluation by Work Experience department of student’s qualifications and objectives.
Description: College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college, and student. Occupational cooperative work experience credit may accrue at the rate of one to 8 units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. Repetition allowed per Title 5, §55253.
Hours: Unpaid 60 hours per unit (60 – 480)
Transferable: CSU and private colleges.

WEXP B250 General Work Experience Education - Paid
1-3 units
Prerequisites: (a) Pursue a planned work experience program, (b) concurrent enrollment in seven or more units (including GWE units) except summer school, (c) evaluation by Work Experience department of students planned work experience program, qualifications and objectives.
Description: Offers students an opportunity to combine a planned occupational program with progressive on-the-job experience (OJT) and practical learning experience in the world of work.
Hours: Paid 75 hours per unit (75 – 225)
Transferable: Not transferable. Degree applicable.

WEXP B250 General Work Experience Education - Unpaid
1-3 units
Prerequisites: (a) Pursue a planned work experience program, (b) concurrent enrollment in seven or more units (including GWE units) except summer school, (c) evaluation by Work Experience department of students planned work experience program, qualifications and objectives.
Description: Offers students an opportunity to combine a planned occupational program with progressive on-the-job experience (OJT) and practical learning experience in the world of work.
Hours: Unpaid 60 hours per unit (60 – 180)
Repeat: None
Transferable: Not transferable. Degree applicable.

WOOD - Woodworking Courses

WOOD B1 Introduction to Woodworking Technologies
3 units
Description: Basic woodworking processes related to industry technology processes to include use and care of machine and hand tools, safe machine and tool use, wood finishing, lathe operation and processes, lamination techniques, woodcarving and other specialized areas of woodworking technology.
Students will create a scope of work for each eight week segment of the semester.
Materials Fee: $45.00 to cover cost of expendable materials (abrasives, adhesives, millwork items, etc.)
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

WOOD B2 Furniture and Cabinetmaking
3 units
Recommended: BC placement into reading level 06.
Description: Skill development on the use and care of portable and stationary woodworking machines. The use of basic wood joint techniques, surface preparations, gluing, clamping and assembly are emphasized.
Materials Fee: $45.00 to cover the cost of materials for the required student projects.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

WOOD B5 Intermediate Cabinetmaking
3 units
Recommended: Successful completion of WOOD B2 with a grade of C or better, or evaluation by instructor of students woodworking skill sets.
Description: Machine woodworking for students with prior basic knowledge of woodworking machines and basic construction and assembly techniques. Emphasizes cabinet construction for industry, styles, and designs, materials and handling, and basic estimating skills.
Materials Fee: $45.00 for lumber, hardware (if applicable), and finishing products, etc.
Hours: 27 lecture, 81 lab
Transferable: CSU and private colleges.

WOOD B65A Advanced Cabinetmaking
3 units
Prerequisites: WOOD B5 with a grade of ‘C’ or better, or evaluation by instructor of students woodworking/cabinetmaking skill sets.
Description: Machine woodworking emphasizing new designs including modular as well as European cabinet construction, new materials and processes, Kortron, melamine, high density particle board, as well as others. Advanced bidding techniques are discussed.
Materials Fee: $45.00 for project materials (glue, hardware, dowels, biscuits, and finishing products. Excludes lumber).
Hours: 27 lecture, 81 lab
Transferable: Not transferable. Degree applicable.

WOOD B65B Advanced Cabinetmaking
3 units
Prerequisites: Successful completion of WOOD B65a or equivalent with a grade of C or better.
Description: Machine and hand techniques necessary for top-end construction emphasized. Non-residential type cabinets studied. Economical use of solid lumbers will be shown. Architecture millwork such as frame and panel wainscot, bookcases, desks, bars, doors, skylights and windows demonstrated. Also included are commercial applications such as store fixtures, counters and reception desks.
Hours: 27 lecture, 81 lab
Transferable: Not transferable. Degree applicable.
WTRT - Water Treatment Courses

WTRT B51 Basic Water Treatment
3 units
Description: Prepares the beginning level student for the lower level California Department of Health Services (CA/DHS) Water Treatment Operator Certification (grades 1 and 2), and to inform the interested public in the science and technology involved in the purification of drinking water.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

WTRT B52 Basic Water Distribution
3 units
Description: Prepares the beginning level student for the lower level CA/NV AWWA (grade 1) and/or CA/DHS (grades 1 and 2) Water Distribution Operator Certification and to inform the interested public in the science and technology involved in the purification of drinking water.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

WTRT B53 Water and Wastewater Analysis
3 units
Recommended: BC placement into reading level 06, and high school chemistry or job related experience.
Description: Prepares the student to take California SWRCB, grades 1 and 2, Waste Water Operation exam. Covers environmental influences, composition of natural water, analysis, interpretation of results and application to treatment problems.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

WTRT B61 Advanced Water Treatment
3 units
Prerequisites: Successful completion of Basic H20 treatment or comparable course.
Description: Prepares the advanced level student for upper level California Department of Health Services (CA/DHS) Water Treatment Operator Certification (grades 3 through 5) and to inform the interested public in the science and technology involved in the purification of drinking water. Field trips required.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.

WTRT B62 Advanced Water Distribution
3 units
Prerequisites: Must have completed a basic water distribution course acceptable to Bakersfield College or the instructor, with a minimum of 36 hours.
Description: Prepares the advanced level student for upper level CA/NV AWWA (grades 2 through 4) and/or CA/DHS (grades 3 through 5) Water Distribution Operator Certification and to inform the interested public in the science and technology involved in the distribution of drinking water.
Hours: 54 lecture
Transferable: Not transferable. Not degree applicable.
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