

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

Description: Students will learn the set-up, operation and programming of a computer numerical control lathe. Instruction in the use of CAM software is included.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

MFGT B3 CNC Mill Programming & Operation

3 units

Description: Students will learn the set-up, operation and programming of a computer numerical control lathe. The use of manual programming techniques to produce a part program with standard G & M codes, utilizing 3 axis CNC Vertical Machining Centers. Content will include exposure to current industry tool types, speeds and feeds, cutter compensation, canned cycles, drilling and tapping cycles. Instruction in the use of CAM software is included.

Hours: 36 lecture, 54 lab

Transferable: CSU and private colleges.

MFGT B48WE Occupational Work Experience Education/ Internship

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. Degree Applicable.

MFGT B51 Advanced Metal Fabrication and Layout Skills

3 units

Recommended: Successful completion of MFGT B1AB or equivalent and WELD B54B or equivalent with a grade of C or better.

Description: This course is designed for people working in or aspiring to enter the Sheet Metal trade in the fields of air conditioning, industrial sheet metal or architectural sheet metal. This course will provide comprehensive instruction in advanced sheet metal layout, including parallel lines, radial lines and triangulation. Students will be introduced to the safe set up and operation of sheet metal fabrication power equipment with emphasis on training equal to industry standards. Students will also

be introduced to the materials and fabrication techniques necessary to build projects of sheet metal aimed at emerging "green energy" and Agriculture & Food Processing fields.

Hours: 27 lecture, 81 lab

Transferable: Not Transferable. Degree Applicable.

MFGT B55 Intermediate Machine Tool Processes

3 units

Prerequisite: Successful completion of MFGT B1AB with a grade of C or better.

Description: This is an Advanced Course designed to take the student through machine shop practices with a specific emphasis placed on mathematical speeds and feed formulas, boring processes on mills and lathes, Cutting Tools, and the National Institute for Metalworking Skills (NIMS) Standards. At the completion of this course, students will have completed certain NIMS certification competencies.

Hours: 27 lecture, 81 lab

Transferable: Not transferable. Degree applicable.

Courses *(continued)*

Association's Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the healthcare provider level; and possess a current EMT certificate or NREMT-Basic registration; or possess a current AEMT certificate in the State of California; or be currently registered as an EMT I

Recommended: One year full-time experience working on an ambulance as an EMT

Description: The Paramedic Preparatory Course is designed to aid in the transition from the level of emergency medical technician (EMT) to the level of paramedic student. The course is designed to prepare the student for the rigorous intensity of the paramedic program and introduce the student to the study skills necessary to be successful in the Bakersfield College's paramedic program. Other topics included in this course will be reviewing of the basic life support skills (BLS) learned in the EMT course, as well as introducing the student to basic advanced life support (ALS) topics, such as electrocardiogram (ECG) rhythms, pathophysiology, pharmacology, and advanced airway maintenance.

Hours: 27 lecture

Transferable: Not transferable. Not degree applicable

ENGL - English Courses

ENGL B1AC Expository Composition Support

0.5 units

Description: This course offers intensive practice in the skills needed to read college-level texts and compose college-level essays. It provides support in developing skills and strategies for success in transfer-level writing classes. Students enrolling in this course must also enroll in ENGL B1A.

Hours: 27 lab

Transferable: Not transferable. Not degree applicable.

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

C-ID: ENGL 145

Transferable: CSU and private colleges. CSU GE C.2; BC GE C.2

FIRE - Fire Technology Courses

FIRE B48WE Work Experience Education/Internship

1-8 units

Prerequisites: Declared major or occupational goal and evaluation

of student's qualifications and objectives.

Description: College credit for fire 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 ours 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.

INDR - Industrial Drawing Courses

INDR B20A Computer Aided Drafting & Design (CAD) - Intermediate

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: This is an intermediate-level CAD course that is structured to impart the foundational knowledge and essential technical skills required to succeed as an entry-level CAD drafter/modeler. Areas of special emphasis include industry standards, drawing conventions, and operational practices typical to the industrial design, architectural drafting, and engineering support fields.

Materials Fee: \$10.00

Hours: 27 lecture, 81 lab

Transferable: CSU, UC, and private colleges

MFGT - Manufacturing/Machine Technology Courses

MFGT B54 Power Metalworking Operations

3 units

Prerequisite: Successful completion of MFGT B1AB and WELD B54B with a grade of C or better.

Description: This course is designed for people working in or aspiring to enter the metalworking trades in the fields of construction Fabrication and manufacturing. This is a comprehensive course in powered sheet metal fabrication equipment. The course will cover the safe set up and operation of press brakes, ironworkers, turret punch, rotary machines, welders, shears, roll-formers, tube benders, and tube notchers. Individualized hands-on experience in tool setup and job shop performance equal to industry standards will be provided. Students will also be introduced to the materials and fabrication techniques necessary to build projects of sheet metal aimed at emerging "green energy", agriculture & food processing fields

Hours: 27 Lecture, 81 Lab

Transferable: Not transferable. Degree applicable.

Courses *(continued)*

MFGT B56 CNC Metal Fabrication Systems

3 units

Prerequisite: Successful completion of MFGT B1AB and WELD B54B with a grade of C or better.

Description: This course is designed for people working in or aspiring to enter the metalworking trades in the fields of construction Fabrication and manufacturing. This is a comprehensive course on CNC metal fabrication software as it relates to press brake, plasma cutter, Water-Jet cutting, use of a router, and tube bending. The course will cover the use of software to design metal components as they relate to the construction fabrication and manufacturing fields, with additional emphasis placed on the design of metal products used in the emerging “green energy” and Agriculture & Food Processing fields.

Hours: 27 Lecture, 81 Lab

Transferable: Not transferable. Degree applicable.

MUSC - Music Courses

MUSC B15 Beginning Ear Training and Sight Singing

1 unit

Co-requisite: MUSC B2 must be taken concurrently.

Description: This course applies and develops the rhythmic, melodic, and harmonic materials of basic music theory through ear training, sight singing, analysis, keyboard exercises and dictation

Hours: 54 lab

C-ID: MUS 125

Transferable: CSU and private colleges.

PBHS - Public Health Science Courses

PBHS B48WE Occupational Work Experience Education/ Internship

1-8 units

Prerequisites: Declared major or occupational goal and evaluation of student’s qualifications and objectives.

Description: College credit for public health 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: Not transferable. Degree applicable

PHED - Physical Education Courses

PHED B13 Intercollegiate Competition 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: CSU, UC, and private colleges; CSU GE E; BC GE E