

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/ Internship

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. Degree applicable.

WELD B53A Shielded Metal Arc Welding

2 units

Recommended: 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: 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.

Recommended: 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 WELD B1A or WELD B53A with a grade of C or better, or

one year of work experience as a welder.

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' welding skills and knowledge equivalent to WELD B55A or WELD B55B.

Recommended: 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 WELD B1A or WELD B53A with a grade of C or better, or one year of work experience as a welder.

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 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better and WELD B1A or WELD B53A with a grade of C or better, or one year of work experience as a welder.

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 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better and WELD B1A or WELD B53A with a grade of C or better, or one year of work experience as a welder.

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 or successful completion of ACDV B50 or ACDV B61 or equivalent with a grade of C or better.

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.