

WELDING (WELD)

WELD-100 Welding Theory & Practice 1

3 Units

36 hours lecture; 54 hours lab; 90 hours total

This is a basic welding course which provides an awareness of welding and cutting processes and develops or upgrades limited manipulative skills involving oxy-fuel and plasma cutting and stick and wire feed welding. It is designed to introduce welding to community members and students in other vocational areas, and upgrade welders already in industry. This course satisfies the degree requirement for Machine Tool and DDGT.

Transfers to CSU only

WELD-101 Welding Theory & Practice 2

3 Units

36 hours lecture; 54 hours lab; 90 hours total

Prerequisite: Completion of WELD-120 or WELD 130 or WELD-100 with a minimum grade of C.

Recommended Preparation: Completion of WELD-100 with a minimum grade of C.

The second of a two-semester welding course designed to fit the needs of students in other vocational areas and upgrade welders already in the industry. This welding course is designed to upgrade and develop manipulative skills, technical knowledge and an appreciation of welding.

Transfers to CSU only

WELD-120 Welding Technology 1

7 Units

54 hours lecture; 216 hours lab; 270 hours total

This class provides a basis for all intermediate and advanced level courses. It is the first course of an extensive two-year program preparing the student for a skilled job in the field of welding. Beginning with trade safety, it provides training in manipulative skills in all phases of oxygen-fuel gas cutting, stick electrodes in various joints and positions, introduces GMAW, PAC, CAC-A, and related theory. Students will need to purchase some safety equipment.

Transfers to CSU only

WELD-121 Welding Technology 2

7 Units

90 hours lecture; 180 hours lab; 270 hours total

Prerequisites or Corequisites: Previous completion of WELD-120 or WELD-130 or WELD-100. Concurrent enrollment in WELD-120 with a minimum grade of C.

The second semester of Welding Technology advances into Gas Tungsten Arc Welding, SMAW electrode selection and the semi-automatic processes of hardwire and Flux core. Concepts and skills are developed with TIG, stick electrodes, core wire and Innershield in the vertical and overhead positions. Materials, preparation of joints and their design and related subjects will be covered.

Transfers to CSU only

WELD-150 Metal Fabrication 1

3 Units

36 hours lecture; 54 hours lab; 90 hours total

Prerequisite: Completion of WELD-120 or WELD-100 with a minimum grade of C.

Course in metal fabrication techniques to improve employable skills of the vocational technical student. Will include safety, the understanding and use of blueprints, use and care of tools, layout from blueprints, use of materials handbooks, hand-on fabrication of various projects, and joining processes. Students will need to purchase some safety equipment.

Transfers to CSU only

WELD-240 Welding Technology 3

7 Units

54 hours lecture; 216 hours lab; 270 hours total

Prerequisite: Completion of WELD-100 or WELD-120 or WELD 130 with a minimum grade of C.

Recommended Preparation: Completion of WELD-120 and WELD-121 or equivalent with a minimum grade of C.

The third semester of Welding Technology continues with the advancement of welding skills in all areas. The study of joint design, materials, layout, symbols, metallurgy, material identification is expanded; material preparation and finishing, including patination is introduced.

Transfers to CSU only

WELD-241 Welding Technology 4

7 Units

54 hours lecture; 216 hours lab; 270 hours total

Prerequisite: Completion of WELD-240 with a minimum grade of C.

This is the capstone class of Welding Technology and applies the manipulative skills of welding with fabricating techniques. The student will be required to use the skills developed by drafting a project, prepare a materials list, time estimate, and then amount of time to fabricate the project. This is the fourth semester in a series of Welding Technology courses leading to an A.S. Degree or Certificate. This class prepares the student for AWS Qualification Tests in the use of stick electrodes and inert gas processes. Students will need to purchase some safety equipment.

Transfers to CSU only