

Welding Engineering Technology, Diploma

School of Technology

The Welding Engineering Technology Diploma provides students with an in-depth background of the welding industry. By combining classroom theory and practical experience, students will develop the skills needed for entry-level jobs in the field of structural welding. Welding courses include practice for welding certifications offered in house by our AWS Accredited Testing Facility. Those planning careers in welding need manual dexterity, good hand-eye coordination and good eyesight. They should have the ability to concentrate on detailed work for long periods and be physically able to bend, stoop and work in awkward positions, as well as possess good problem-solving aptitude, shop math skills and exhibit a strong work ethic. Successful completion of this program of study leads to the Welding Engineering Technology Diploma.

Career Opportunities

Students who earn their Welding Engineering Technology Diploma will be prepared to enter the workforce as an entry-level structural welder, welder's helper, or entry-level fabricator.

Program Learning Outcomes

Upon successfully completing this program, students will be able to:

- Successfully weld SMAW, GMAW in all positions, on various materials, with or without joint preparation.
- Read, interpret and create blueprints.
- Demonstrate ability to make sound decisions in design and manufacturing of welded fabrications/assemblies based on the following: joint design, welding equipment, metallurgy, material application.
- Communicate technical information effectively.
- Identify defects by use of DT/NDT methods.
- Maintain and troubleshoot welding, industrial and plant equipment.

| Sugg. Term | Seq # | Course ID | Course Title | Cr. | Term Offered | Prereq(s) | Options Available |
|------------|-------|-----------|------------------------|-----|--------------|-------------------|-------------------|
| 1st Fall | 1 | PDV 101 | First Year Seminar | 1 | F, Sp, Su | | |
| | 2 | WEL 125 | Welding I | 4 | F, Sp, Su | | |
| | 3 | DFT 110 | Blueprint Reading | 2 | F | | |
| | 4 | WEL 209 | Industrial Maintenance | 3 | F | | |
| | 5 | WEL 220 | Welding Codes | 3 | F | | |
| | 6 | DFT 258 | AutoCAD | 4 | F, Sp | | |
| 1st Spring | 7 | MET 105 | Welding Metallurgy I | 3 | Sp | | |
| | 8 | WEL 221 | Metal Fabrication | 4 | F, Sp, Su | WEL 125 & DFT 110 | |
| | 9 | WEL 228 | SMAW | 4 | Sp | WEL 125 | |
| | 10 | WEL 226 | GMAW | 4 | F, Sp | WEL 125 | |

Total Program Credits

32