

PROGRAMS

WELDING TECHNOLOGY

Contact(s): Christopher Cesaro

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metalworking industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses may include math, print reading, metallurgy, welding inspection, and destructive and non-destructive testing providing the student with industry-standard skills developed through classroom training and practical application.

Graduates of the Welding Technology curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

Learning Outcomes

Upon completion of this program, students should be able to:

- Fabricate metal structures based on blueprints while safely utilizing metal cutting and welding skills
- Perform SMAW fillet and groove welds in flat, horizontal, vertical and overhead positions in plate and 2G, 3G, 4G and 6G in pipe, in accordance with AWS code
- Perform GMAW/FCAW fillet and groove welds in flat, horizontal, vertical and overhead positions in plate and 2G, 3G, 4G and 6G in pipe, in accordance with AWS code
- Perform GTAW fillet and groove welds in flat, horizontal, vertical and overhead positions in plate and 2G, 3G, 4G and 6G in pipe, in accordance with AWS code

Welding Technology Diploma - D50420

| First Year | | |
|-----------------------|---|--------------|
| Fall | | Credit Hours |
| ACA 111 | College Student Success | 1 |
| ENG 101 or ENG 111 | Applied Communications I Writing and Inquiry | 3 |
| WLD 110 | Cutting Processes | 2 |
| WLD 115 | SMAW (Stick) Plate | 5 |
| WLD 121 | GMAW (MIG) FCAW/Plate | 4 |
| WLD 141 | Symbols and Specifications | 3 |
| | Credit Hours | 18 |
| Spring | | Credit Hours |
| ISC 112 | Industrial Safety | 2 |
| MAT 110 | Mathematical Measurement and Literacy | 3 |
| WBL 110 or WBL 111 | World of Work Work-Based Learning I | 1 |
| WLD 116 | SMAW (stick) Plate/Pipe | 4 |
| WLD 131 | GTAW (TIG) Plate | 4 |
| WLD 265 | Automated Welding/Cutting | 4 |
| | Credit Hours | 18 |
| Summer | | Credit Hours |
| WLD 132 | GTAW (TIG) Plate/Pipe | 3 |
| WLD 151 | Fabrication I | 4 |
| | Credit Hours | 7 |
| | Total Credit Hours | 43 |

Welding Part-time Pathway

| Term 1 | | Credit Hours |
|-----------------------|---|---------------------|
| ACA 111 | College Student Success | 1 |
| WLD 121 | GMAW (MIG) FCAW/Plate | 4 |
| WLD 141 | Symbols and Specifications | 3 |
| | Credit Hours | 8 |
| Term 2 | | Credit Hours |
| ISC 112 | Industrial Safety | 2 |
| WLD 131 | GTAW (TIG) Plate | 4 |
| WLD 265 | Automated Welding/Cutting | 4 |
| | Credit Hours | 10 |
| Term 3 | | Credit Hours |
| WLD 132 | GTAW (TIG) Plate/Pipe | 3 |
| | Credit Hours | 3 |
| Term 4 | | Credit Hours |
| ENG 101 or ENG 111 | Applied Communications I Writing and Inquiry | 3 |
| WLD 110 | Cutting Processes | 2 |
| WLD 115 | SMAW (Stick) Plate | 5 |
| | Credit Hours | 10 |
| Term 5 | | Credit Hours |
| MAT 110 | Mathematical Measurement and Literacy | 3 |
| WBL 110 or WBL 111 | World of Work Work-Based Learning I | 1 |
| WLD 116 | SMAW (stick) Plate/Pipe | 4 |
| | Credit Hours | 8 |
| Term 6 | | Credit Hours |
| WLD 151 | Fabrication I | 4 |
| | Credit Hours | 4 |
| | Total Credit Hours | 43 |

Basic Welding Certificate - C50420BW

| First Year | | |
|-------------------|-----------------------|---------------------|
| Fall | | Credit Hours |
| WLD 110 | Cutting Processes | 2 |
| WLD 115 | SMAW (Stick) Plate | 5 |
| WLD 121 | GMAW (MIG) FCAW/Plate | 4 |
| | Credit Hours | 11 |
| Spring | | Credit Hours |
| ISC 112 | Industrial Safety | 2 |
| WLD 131 | GTAW (TIG) Plate | 4 |

| | | |
|--|--------------------|----|
| | Credit Hours | 6 |
| | Total Credit Hours | 17 |

Intermediate Welding Certificate - C50420IW

| First Year | | |
|-------------------|---------------------------|---------------------|
| Spring | | Credit Hours |
| ACA 111 | College Student Success | 1 |
| ISC 112 | Industrial Safety | 2 |
| WLD 116 | SMAW (stick) Plate/Pipe | 4 |
| WLD 265 | Automated Welding/Cutting | 4 |
| | Credit Hours | 11 |
| Summer | | Credit Hours |
| WLD 132 | GTAW (TIG) Plate/Pipe | 3 |
| WLD 151 | Fabrication I | 4 |
| | Credit Hours | 7 |
| | Total Credit Hours | 18 |

Welding - CCP

| Courses | | Credit Hours |
|----------------|-------------------------|---------------------|
| ACA 111 | College Student Success | 1 |
| ISC 112 | Industrial Safety | 2 |
| WLD 110 | Cutting Processes | 2 |
| WLD 115 | SMAW (Stick) Plate | 5 |
| WLD 121 | GMAW (MIG) FCAW/Plate | 4 |
| WLD 131 | GTAW (TIG) Plate | 4 |
| | Total Credit Hours | 18 |