

APPLIED ENGINEERING & TECHNOLOGIES

WELDING TECHNOLOGY

Welding Technology Degree - A50420

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

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

Welding Technology Diploma - D50420

Successful graduates of the Welding Technology diploma 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.

Welding Technology Certificate - C50420B

Instruction includes an introduction to consumable and non-consumable electrode welding and cutting processes. Additional courses in blueprint reading, metallurgy, and destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

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

Fabrication Design Certificate - C50420C

Instruction includes an introduction to fabrication design as it applies to welding technology.

Computer Controlled Welding Certificate - C50420D

Instruction includes an introduction to computer controlled welding.

Program Sequence

First Semester

| | | | |
|------------|------|----------------------------------|-----|
| ENG | 110 | Freshman Composition | 3 |
| WLD | 110 | Cutting Processes | 2 |
| WLD | 115 | SMAW (Stick) Plate..... | 5 |
| WLD | 121 | GMAW (MIG) | |
| FCAW/Plate | 4WLD | | 141 |
| | | Symbols and Specifications | 3 |

Complete Welding Certificate (C50420B): WLD 110, WLD 115, WLD 121, WLD 141

Second Semester

| | | | |
|-------|------|-------------------------------------|------------|
| MAT | 110 | Math Measurement and Literacy | 3 |
| WLD | 116 | SMAW (Stick) Plate/Pipe..... | 4 |
| WLD | 122 | GMAW (MIG) | |
| Plate | 3WLD | 131 | GTAW (TIG) |
| Plate | 4 | | |

Third Semester

| | | | |
|-----|-----|------------------------------|---|
| WLD | 132 | GTAW (TIG) Plate/Pipe | 3 |
| WLD | 151 | Fabrication I | 4 |
| WLD | 262 | Inspection and Testing | 3 |

Complete Fabrication Design Certificate (C50420C): WLD 110, WLD 131, WLD 141, WLD 151

Complete Welding Technology Diploma (D50420): ENG 110, MAT 110, WLD 110, WLD 115, WLD 116, WLD 121, WLD 122, WLD 131, WLD 132, WLD 141, WLD 151, WLD 262

Fourth Semester

| | | | |
|-----------------|-----|--------------------------------|---|
| ISC | 112 | Industrial Safety | 2 |
| WLD | 215 | SMAW (Stick) Pipe | 4 |
| PSY | 118 | Interpersonal Psychology | 3 |
| Elective List I | | | 3 |

Fifth Semester

| | | | |
|-----|-----|-------------------------------------|---|
| WLD | 231 | GTAW (TIG) Pipe | 3 |
| WLD | 265 | Automated Welding/Cutting | 4 |
| COM | 110 | Introduction to Communication | 3 |
| HUM | 121 | The Nature of America..... | 3 |

Complete Computer Controlled Welding Certificate (C50420D): WLD 110, WLD 121, WLD 131, WLD 141, WLD 265

Elective List I (Select 3 hours from the following courses):

| | | | |
|-----|-----|--------------------------------|---|
| BUS | 110 | Introduction to Business | 3 |
| MEC | 180 | Engineering Materials | 3 |
| WBL | 111 | Work-Based Learning I | 1 |
| WBL | 112 | Work-Based Learning I | 2 |

Graduation Requirements 66 Credit Hours