

# 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
ELC	127	Software for Technicians .....	2
WLD	110	Cutting Processes .....	2
WLD	115	SMAW (Stick) Plate.....	5
WLD	141	Symbols and Specifications .....	3

#### Second Semester

COM	110	Intro to Communication .....	3
MAT	110	Math Measurement and Literacy.....	3
WLD	116	SMAW (Stick) Plate/Pipe.....	4
WLD	131	GTAW (TIG) Plate.....	4

#### Third Semester

WLD	132	GTAW (TIG) Plate/Pipe.....	3
WLD	261	Certification Practices.....	2
WLD	262	Inspection and Testing .....	3
Elective List I		.....	2

#### Fourth Semester

MEC	161	Manufacturing Processes I.....	3
PSY	118	Interpersonal Psychology .....	3
WLD	121	GMAW (MIG) FCAW/Plate.....	4

Elective List I.....	3
<i>Complete Welding Technology Certificate (C50420B): WLD 110, WLD 115, WLD 121, WLD 141</i>	

*Complete Computer Controlled Welding Certificate (C50420D): WLD 110, WLD 115, WLD 121, WLD 131, WLD 141*

#### Fifth Semester

ACA	220	Professional Transition .....	1
HUM	110	Technology and Society .....	3
ISC	112	Industrial Safety .....	2
WLD	151	Fabrication I .....	4
WLD	122	GMAW (MIG) Plate.....	3

*Complete Fabrication Design Certificate (C50420C): Choose DFT 151 + WLD 121, WLD 141, WLD 151*

*Complete Computer Controlled Welding Certificate (C50420D): WLD 110, WLD 115, WLD 121, WLD 131, WLD 141*

*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 261, WLD 262*

#### Elective List I (Select 5 hours from the following courses):

BUS	110	Introduction to Business .....	3
DFT	151	CAD I .....	3
DFT	152	CAD II .....	3
DFT	170	Engineering Graphics .....	3
MEC	180	Engineering Materials .....	3
PHY	121	Applied Physics I .....	4
WBL	111	Work-Based Learning I .....	1

**Graduation Requirements..... 65 Credit Hours**