WELDING TECHNOLOGY 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.

Successful 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.

Welding Technology

Associate in Applied Science Degree A50420
(Revised 2003*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 18 Hours				
A. English: 6 Hours				
ENG 111 Expository Writing	3	0	0	3
ENG 113 Literature-Based Research	3	0	0	3
or				
ENG 114 Prof Research & Reporting	3	0	0	3
B. Social/Behavioral Sciences: 3 Hours				
Selected from the list of social/behavioral sciences electives for the Associate in Applied Science degree appearing in the current catalog.				
C. Humanities/Fine Arts: 3 Hours				
Selected from the list of humanities/fine arts electives for the Associate in Applied Science degree appearing in the current catalog.				
D. Math/Natural Sciences: 6 Hours				
MAT 121 Algebra/Trigonometry I	2	2	0	3
MAT 122 Algebra/Trigonometry II	2	2	0	3
II. Major Courses: 49 Hours				
A. Core: 18 Hours				
WLD 110 Cutting Processes	1	3	0	2
WLD 115 SMAW (Stick) Plate	2	9	0	5
WLD 121 GMAW (MIG) FCAW/plate	2	6	0	4
WLD 131 GTAW (TIG) Plate	2	6	0	4
WLD 141 Symbols & Specifications	2	2	0	3
B. Other Major Courses:				
1. Required Hours: 21 Hours				
BPR 111 Blueprint Reading	1	2	0	2
WLD 116 SMAW (Stick) Plate/Pipe	1	9	0	4
WLD 122 GMAW (MIG) Plate/Pipe	1	6	0	3
WLD 132 GTAW (TIG) Plate/Pipe	1	6	0	3
WLD 143 Welding Metallurgy	1	2	0	2
WLD 215 SMAW (Stick) Pipe	1	9	0	4
WLD 231 GTAW (TIG) Pipe	1	6	0	3

Welding Technology A50420 (Continued)

Title	Hours Class	Lab	Work Exp.	Credits
2. 10 Hours selected from the following:				
COE 111-112 Co-op Work Experience I	0	0	10-20	1-2
COE 121-122 Co-op Work Experience II	0	0	10-20	1-2
COE 131-132 Co-op Work Experience III	0	0	10-20	1-2
WLD 151 Fabrication I	2	6	0	4
WLD 221GMAW (MIG) Pipe	1	6	0	3
WLD 251 Fabrication II	1	6	0	3
WLD 261 Certification Practices	1	3	0	2
WLD 262 Inspection & Testing	2	2	0	3
WLD 265 Automated Welding & Cutting	2	6	0	4
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
or				
ACA 115 Success & Study Skills	0	2	0	1
Total Credits				**68**

Welding Technology

Diploma D50420D

(Revised 2003*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 6 Hours				
A. English:3 Hours				
ENG101 Applied Communications I	3	0	0	3
B. Math/Natural Sciences: 3 Hours				
MAT 101 Applied Mathematics I	2	2	0	3
AND				
Students are required to demonstrate competency in RED 080, prior to receiving a diploma.				
II. Major Courses: 31 Hours				
A. Core: 18 Hours				
WLD 110 Cutting Processes	1	3	0	2
WLD 115 SMAW (Stick) Plate	2	9	0	5
WLD 121 GMAW (MIG) FCAW/plate	2	6	0	4
WLD 131 GTAW (TIG) Plate	2	6	0	4
WLD 141 Symbols & Specifications	2	2	0	3
B. Other Major Courses: 13 Hours				
BPR 111 Blueprint Reading	1	2	0	2
WLD 116 SMAW (Stick) Plate/Pipe	1	9	0	4
WLD 143 Welding Metallurgy	1	2	0	2
WLD 261 Certification Practices	1	3	0	2
WLD 262 Inspection & Testing	2	2	0	3
III. Other Required Courses: 1 Hour				
ACA 111 College Student Success	1	0	0	1
or				
ACA 115 Success & Study Skills	0	2	0	1
Total Credits				**38**

Welding Technology

SMAW (Stick) Welding Certificate C50420C1

(Revised 2001*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 0 Hours				
Students are required to demonstrate competency in ENG 080, RED 080 and MAT 070 prior to receiving a certificate.				
II. Major Courses: 14 Hours				
WLD 110 Cutting Processes	1	3	0	2
WLD 115 SMAW (Stick) Plate	2	9	0	5
WLD 116 SMAW (Stick) Plate/Pipe	1	9	0	4
WLD 141 Symbols & Specifications	2	2	0	3
Total Credits				**14**

Welding Technology

GTAW (TIG) Welding Certificate C50420C2

(Revised 2001*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credits
I. General Education Courses: 0 Hours				
Students are required to demonstrate competency in ENG 080, RED 080 and MAT 070 prior to receiving a certificate.				
II. Major Courses: 13 Hours				
A. Core: 7 Hours				
WLD 131 GTAW (TIG) Plate	2	6	0	4
WLD 141 Symbols & Specifications	2	2	0	3
B. Other Major Courses: 6 Hours				
WLD 132 GTAW (TIG) Plate/Pipe	1	6	0	3
WLD 231 GTAW (TIG) Pipe	1	6	0	3
Total Credits				**13**

Welding Technology

GMAW (MIG) Welding Certificate C50420C3

(Revised 2001*03) Course and Hour Requirements

Title	Hours Class	Lab	Work Exp.	Credit
I. General Education Courses: 0 Hours				
Students are required to demonstrate competency in ENG 080, RED 080 and MAT 070 prior to receiving a certificate.				
II. Major Courses: 13 Hours				
A. Core: 7 Hours				
WLD 121 GMAW (MIG) FCAW/plate	2	6	0	4
WLD 141 Symbols & Specifications	2	2	0	3
B. Other Major Courses: 6 Hours				
WLD 122 GMAW (MIG) Plate/Pipe	1	6	0	3
WLD 221 GMAW (MIG) Pipe	1	6	0	3
Total Credits				**13**