

WELDING

This program of study emphasizes the skills needed for employment in the welding industry, including the manufacturing, fabrication, maintenance, and construction sectors.

- **Technical Certificate Option** - The Technical Certificate in Welding Technology is a two semester program that contains technical and advanced technical courses.
- **Associate of Applied Science Degree Option** - The Associate of Applied Science degree, with a major in Welding Technology, is a four semester program that contains technical, advanced technical and general education courses.

Admission Criteria: Placement test and pre-admission advising.

Technical Education Courses

Fall Semester			Spring Semester		
Course Title		Credits	Course Title		Credits
ENV 102	Safety Orientation (OSHA-10)	1	WEL 115	Gas Metal Arc Welding	3
WEL 101	Welding Math	2	WEL 116	Gas Tungsten Arc Welding	3
WEL 105	Welding Theory	3	WEL 120	Fabrication and Production	3
WEL 106	Cutting Processes	3	WEL 215	Gas Metal Arc Welding II	3
WEL 111	Shielded Metal Arc Welding	3	WEL 216	Gas Tungsten Arc Welding II	3
WEL 112	Shielded Metal Arc Welding II	3	WEL 223	Core Wire Welding	3
WEL 150	Welding Blueprint Reading	3			
Semester Total		18	Semester Total		18
Total Technical Certificate Credits					36

General Education Courses.....Credits

- COM 102 Interpersonal Communication or COM 105 Public Speaking..... 3
- CSA 105 Introduction to Computer Applications and Concepts..... 3
- ENG 100 Technical Writing or ENG 101 English Composition I 3
- HUM 101 Ethics in the Workplace or PSY 101 General Psychology 3
- MAT 101 Technical Math or MAT 150 College Algebra..... 3

TOTAL GENERAL EDUCATION CREDITS.....15

TOTAL RELATED ELECTIVE CREDITS.....9

TOTAL AAS PROGRAM CREDITS.....60

PROGRAM OUTCOMES

- Demonstrate an understanding of the methods and problems of production and exchange.
 - Identify quality welding design and workmanship.
 - Demonstrate competency in the ability to select, care for, and use industrial products wisely.
 - Demonstrate competency in basic welding fundamentals.
 - Identify materials and processes commonly used in welding.
 - Develop work habits and interpersonal skills necessary to be a productive employee.
 - Demonstrate ability to use welding tools and machines.
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GENERAL EDUCATION PROGRAM OUTCOMES

- Compose coherent written communication.
 - Deliver coherent oral communication.
 - Show proficiency in locating, analyzing, documenting, and ethically using information sources.
 - Perform and interpret calculations.
 - Develop logical problem solving skills and/or critical thinking skills.
 - Identify appropriate strategies for gathering, analyzing, and displaying data to draw conclusions from scientific data.
 - Collaborate effectively, which cultivates a respect for human diversity.
 - Demonstrate technology literacy appropriate to area of study.
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