

Certificate in Welding Technology

Program Outcomes

Upon completion of this certificate, students will be able to have marketable welding skills, will have understanding of quality control, process control and problem solving, and experience with the newest technological advances.

Employment Opportunities or Additional Educational Options

This certificate program can be used as the first year of the A.A.S. in Industrial Technology degree. Students wishing to complete an associate degree are encouraged to earn this certificate at SMC first. The certificate program will also prepare students for employment in areas such as welding fitters, welding inspectors, production welding, maintenance welding, and set-up operators.

To Learn More About This Program

Contact Ferenc Sefcsik at 269-687-5673 or fsefcsik@swmich.edu or Allyson Starrett at 269-687-5646 or astarrett01@swmich.edu.

Certificate Requirements

To earn this certificate, students must have an overall GPA of 2.0 or higher, fulfill the course requirements of the program listed below, and complete a minimum of 28 credit hours. Additionally, each general education course and prerequisite course must be completed with a minimum grade of "C."

Certificate Courses

Course ID	Course	Credits
EDUC 120	Educational Exploration and Planning	1 credit
BUSI 200	Small Business Management	3 credits
BUSI 240	Professionalism Workshop	1 credit
CONS 115	Construction Math	2 credits
INTE 227	Industrial Robotics	2 credits
WELD 159	Basic Welding	2 credits
WELD 168	Welder Certification Preparation	2 credits
WELD 169	GMAW/MIG Welding	4 credits
WELD 170	Industrial Welding	2 credits
WELD 175	GTAW/TIG Welding	4 credits
WELD 180	SMAW/Stick Welding	4 credits
WELD 235	Metallurgy for Welders	2 credits
WELD 265	Thermal Cutting Processes	2 credits
WELD 277	Welding Fabrication and Maintenance Repair	2 credits
WELD 279	Welding and Inspection	2 credits

Total Program Credits: 35

Additional Notes About the Certificate in Welding Technology Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.

Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
EDUC 120 Educational Exploration and Planning	1 credit	ENGL 115 or test score (concurrent enrollment allowed)
BUSI 240 Professionalism Workshop	1 credit	None
WELD 159 Basic Welding	2 credits	MATH 098 or test score (concurrent enrollment allowed)
WELD 169 GMAW/MIG Welding	4 credits	WELD 159 (concurrent enrollment allowed)
WELD 170 Industrial Welding	2 credits	WELD 159 (concurrent enrollment allowed)
WELD 175 GTAW/TIG Welding	4 credits	WELD 159 (concurrent enrollment allowed)
WELD 235 Metallurgy for Welders	2 credits	None
WELD 265 Thermal Cutting Processes	2 credits	None

SECOND SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
BUSI 200 Small Business Management	3 credits	ENGL 115 or test score (concurrent enrollment allowed)
CONS 115 Construction Math	2 credits	MATH 098 or test score
INTE 227 Industrial Robotics	2 credits	ENGL 115 or test score (concurrent enrollment allowed)
WELD 168 Welder Certification Preparation	2 credits	WELD 159; WELD 169, WELD 175, or WELD 180; WELD 265; WELD 279 (concurrent enrollment allowed)
WELD 180 SMAW/Stick Welding	4 credits	WELD 159 (concurrent enrollment allowed)
WELD 277 Welding Fabrication and Maintenance Repair	2 credits	WELD 159; WELD 169; WELD 180 (concurrent enrollment allowed)
WELD 279 Welding and Inspection	2 credits	WELD 159 (concurrent enrollment allowed)