The Welding Technology program offers students a modular-based curriculum in one or two year formats including technical courses in structural and pipe welding, pipe fitting and blueprint reading and drafting. The pipe welding certificate offers training in basic and pipe welding techniques utilizing the shielded metal arc welding process. Second year students enroll in advanced welding and receive training in gas metal arc welding, gas tungsten arc welding, and pipe fabrication.

All the welding program options are combined with a variety of general education courses and technology theory courses. Significant emphasis is placed on math, communication, physical science, and social science courses. Special courses in the welding metallurgy and quality assurance/quality control are also required within the technology. This mix of theory courses, general education courses, and skill training places our graduates in high demand.

There are a number of scholarships awarded to students in welding technology. The Reginald Roy Scholarship encourages students to maximize skill potential and career opportunities.

**KEY LEARNING OBJECTIVES**

Graduates with the associate in applied science degree in welding function at an entry-level position for welders in the following areas:

- AWS D1.1 Shielded Metal Arc Welding (SMAW) Structural Certification
- ASME Section IX SMAW Pipe Certification
- ASME Section IX GTAW Pipe Certification
- Demonstrate safe, competent use of Oxy-Fuel Cutting Equipment

Graduates take the following tests:

- A.W.S. Structural Certification
- A.S.M.E. Section 9 SMAW Pipe Certification
- A.S.M.E. Section 9 GTAW Pipe Certification

**PREREQUISITES**

**AAS Degree:** Admission to the Associate in Applied Science Degree Welding Technology program is determined upon successful completion of the Certificate in Pipe Welding Program.

**Certificate:** high school level Algebra I required.
WELDING TECHNOLOGY
Certificate In Pipe Welding

FIRST SEMESTER
WEL 111 Metal Technology 3
WEL 131 Shielded Metal Arc Welding (SMAW) Basic 2
WEL 132 Shielded Metal Arc Welding Advanced I 2
WEL 134 Shielded Metal Arc Welding Structural 2
WEL 151 Flux-Cored Arc Welding (FCAW) 2
WEL 186 Blueprint Reading & Drafting for Welders 3
MAT 113 Technical Mathematics I 3

CREDITS

SECOND SEMESTER
WEL 133 Shielded Metal Arc Welding Advanced II 2
WEL 135 Shielded Metal Arc Welding Pipe I 2
WEL 136 Shielded Metal Arc Welding Pipe II 2
WEL 137 Shielded Metal Arc Welding Pipe III (ASME Qualification) 2
ENG 101 College Composition 3
Elective Any Math or Science (100 level or higher) 3

TOTAL CERTIFICATE CREDITS
31-32

IMPORTANT:
Be advised that EMCC has space available each fall for 24 first-year Pipe Welding certificate students and only 14 second-year Welding Technology Associate in Applied Science Degree students. All students who are offered admission are initially placed in the one-year Pipe Welding Certificate Program. Upon completion of their first semester in technology courses, students are then offered the opportunity to apply for second-year slots in the Associate Degree Program. (Grade point average and successful progression in all courses including the general education courses required for welding are used in awarding the second-year slots). Placement test scores may extend program length upon entry. For further clarification, please contact the Admissions Office.

WELDING TECHNOLOGY
Associate in Applied Science Degree

All certificate in Pipe Welding classes required 31-32

THIRD SEMESTER
FIT 231 Pipelfitting Fundamentals 2
FIT 233 Practical Pipelfitting I 1.5
FIT 235 Practical Pipelfitting II 1.5
WEL 265 Gas Metal Arc Welding Basic 1
WEL 267 Gas Metal Arc Welding Advanced 1
WEL 269 Gas Metal Arc Welding Pipe 1
ENG 215 Business and Technical Writing^ 3
Elective Any Humanities/Social Science 3
Elective Any Communications/Humanities/Math/Social Science/Science (100 level or higher) 3

FOURTH SEMESTER
WEL 222 Quality Assurance/Quality Control 4
WEL 270 Gas Tungsten Arc Welding Basic (GMAW) 2
WEL 277 Gas Tungsten Arc Welding Pipe I (GMAW) 2
WEL 278 Gas Tungsten Arc Welding Pipe II (GMAW) 2
WEL 279 Gas Tungsten Arc Welding Pipe III (GMAW) 2
Elective Any Humanities or Social Science 3

TOTAL AAS DEGREE CREDITS
63-64

^ ELO Capstone

DID YOU KNOW?

EMCC provides campus housing for over 260 students.

EMCC’s Student Success Center offers tutoring services free of charge to our students.

EMCC’s Athletic Department sponsors many on-campus intramural sports and recreational events.

EMCC students enjoy small class sizes, supportive faculty, transferable courses and leadership/engagement opportunities all for under $4,000 per year (most programs, based on 30 credit hours, in-state rate)

Campus tours are available. Call 207-974-4857 or schedule an appointment through our website.

For more information or to apply online, visit us on the web at www.emcc.edu

Follow us on social media for the latest EMCC news!

www.facebook.com/emccbangor

@EMCCAdmissions

EMCC is an equal opportunity/affirmative action institution and employer. For more info, please call 207-974-4633.

Edited 10/18/18