

Welding Technology, AAS

Academic Year 2024-2025

Program Description:

The Welding Technology Program is an industry-driven, hands-on program that prepares individuals to meet the rigorous demands of the manufacturing sector.

The welding program delivers skills that an individual needs to be successful in industry. This is accomplished through a hands-on approach and intensive student instructor interaction. The best way to learn to weld is by actually welding. Therefore, the focus is on work done outside the traditional classroom and in a shop setting, providing the student a true feel for the correct way to weld. A major subject is safety and this program teaches individuals how to protect themselves and their environment while completing the job. Students learn a variety of welding methods including TIG, MIG, and SMAW, as well as metal cutting techniques to ensure they have the necessary skills expected by employers.

This program provides new welders a firm foundation to earn certification and thrive in the field.

Comprehensive full- and part-time programs are available, thus enabling current workforce members to improve their technical skills and develop professionally while helping their employers become more competitive.

Career Outlook and Salary Forecast:

For the most current information, please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at www.bls.gov/ooh/.

Program Outcomes:

- Demonstrate a safety attitude and conduct himself/herself in a safe way in the classroom and shop
- Apply mathematical skill appropriate to welding
- Read and interpret blueprints used in the weld shop
- Select and use the correct tools in the shop
- Identify and describe the function of basic weld types
- Complete assigned project in the assigned time
- Demonstrate appropriate improvement in skills while welding
- Demonstrate a positive attitude and work habits in a professional manner
- Apply knowledge and skills in fundamentals of welding, basic to specialized
- Demonstrate mathematical skills appropriate for welding applications
- Understand and use: shielded metal arc welding, gas metal arc welding, flux cored welding, stick pipe welding (uphill and downhill)
- Show understanding and ability to troubleshoot and correct a weld
- Know and apply welding nomenclature
- Determine type of weld needed for specific situations
- Demonstrate the ability to adjust to changing procedures and updates to processes

Program Admission Requirements:

The Welding Technology Program has admission and candidacy requirements in addition to the Mountwest Community & Technical College admission guidelines.

Contact Information:

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Mountwest empowers students to learn and lead in the community and in the workforce.

Welding Technology – Major Code CW10

Name:	ID Number 942-
Educational Counselor:	
Faculty Advisor:	

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
COM 125	Interpersonal Communication		3				
MT 105	Industrial Safety		2				
WELD 112	Basic Metallurgy		3				
WELD 115	Introduction to Welding		8				
			16				
MAT 135	Technical Math		3				
WELD 120	Shield Metal Arc Welding (SMAW)		5				
WELD	Restricted Elective ¹		4				
IT 101	Fundamentals of Computers		3				
			15				
EC 102	Basic Economics		3				
WELD 130	Gas Meta Arc Welding		5				
WELD 140	Flux Cored Arc Welding		5				
WELD	Restricted Elective ²		4				
			17				
ENL 131	Technical Report Writing ⁴		3				
HMN 235	Leadership Studies through the Humanities		3				
WELD RE	Restricted Elective ³		4				
WELD 298	Welding Capstone		2				
			12				
HOURS REQUIRED FOR GRADUATION: 60							

1-3. Restricted Elective 1 will be a choice between WELD 210 Stick Pipe Welding (SMAW-Pipe) or WELD 125 Advanced SMAW Plate Welding. (each course offered on 8 week schedule). Students with advanced skills or those with EDGE credits may complete WELD 130 or WELD 140 during the second term.

4. ENL 131 requires placement in 100 level English or corequisite ENL 095.