

### Program Description

The Welding Engineering Technology AAS provides students with an in-depth background of the welding industry. By combining classroom theory and practical experience, students will develop the skills needed for entry-level jobs in the field of welding. Welding courses include practice for welding certifications offered in house by our AWS Accredited Testing Facility. Those planning careers in welding need manual dexterity, good hand- eye coordination and good eyesight. They should have the ability to concentrate on detailed work for long periods and be physically able to bend, stoop and work in awkward positions, as well as possess good problem-solving aptitude, shop math skills and exhibit a strong work ethic. Successful completion of this program of study leads to the associate of applied science degree.

### Career Opportunities

Graduates of the welding engineering technology program have obtained jobs with the following titles: welder, welding supervisor, nuclear service technician, QA/QC inspector, QA supervisor, technical sales representative and entrepreneur.

### Program Learning Outcomes

Upon successfully completing this program, students will be able to:

- Successfully weld SMAW, GMAW and GTAW in all positions, on various materials, with or without joint preparation.
- Read, interpret and create blueprints.
- Demonstrate ability to make sound decisions in design and manufacturing of welded fabrications/assemblies based on the following: joint design, welding equipment, metallurgy, material application.
- Communicate technical information effectively, demonstrate accurate record keeping and utilize technical reference materials.
- Identify defects by use of DT/NDT methods.
- Maintain and troubleshoot welding, industrial and plant equipment.

Sugg. Term	Seq #	Course ID	Course Title	Cr	Prereq/Coreq(Co)	Options Available
1st Fall	1	PDV 101	First Year Seminar	1		
	2	WEL 125	Welding I	4		
	3	DFT 110	Blueprint Reading	2		
	4	WEL 209	Industrial Maintenance	3		
	5	WEL 220	Welding Codes	3		
	6	DFT 258	AutoCAD	4		
1st Spring	7	MET 105	Welding Metallurgy I	3		
	8	WEL 221	Metal Fabrication	4	WEL 125 & DFT 110	
	9	WEL 228	SMAW	4	WEL 125	
	10	WEL 226	GMAW	4	WEL 125	
2nd Fall	11	MET 205	Welding Metallurgy II	3	MET 105	
	12	WEL 227	GTAW	4	WEL 125	
	13	WEL 222	Fundamentals of Aluminum	4	WEL 125	
	14	MTH 104	Introduction to Applied Mathematics	4	MTH 050 or Placement	
	15	ENG 161	College Writing	3	ENG 085 or Placement	
2nd Spring	16	WEL 224	NDT and DT	3	MET 105	
	17	WEL 225	Advanced Fabrication	3	WEL 221	
	18	WEL 230	Pipe Welding	3	WEL 227	
	19	ENG 162	Technical Communication	3	ENG 161	ENG 163 or ENG 164
	20	Elective	Social Science Elective	3		Page 47 Column III

Minimum Program Credits

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WET