

Welding Technology

Award Type: Certificate of Achievement

The certificate in welding technology is designed to provide comprehensive occupational training in all common types of welding methods as related to today's welding fabrication industries. This program will provide students with manipulative skills and technical knowledge required to perform in the areas of oxyacetylene, shielded metal arc, gas metal arc (G.M.A.W. and T.I.G.) welding processes. Also included in this program are hand cutting and semi-automatic cutting techniques. Certification tests may be taken. Employment opportunities available are welder, welder mechanic, maintenance welder, construction welder, pipe welder, and welding inspectors.

The graduate of the Certificate of Achievement in Welding Technology will:

- Pass at least one welder qualification test (3G-verticle or 4G-overhead) using at least one basic process.
- Pass the GMAW and SMAW processes to the American Welding Societies D1.1 Structural Welding Code.
- Have competency in blueprint reading.
- Have a working knowledge of metallurgy.
- Be able to do basic layout, fitting and cutting operation.
- Have the ability to operate basic welding equipment in a safe manner.

Program Requirements

Required core courses (16 units):

Course Number	Course Title	Units
MT 109	Survey of Machining and Manufacturing	4.0
WLDT 106	Beginning Welding	3.0
WLDT 107	Advanced Welding	3.0
WLDT 306	Layout and Fabrication Interpretation	3.0
WLDT 300	Shop Math and Measurement	3.0

Plus a minimum of 15 units selected from the following:

Course Number	Course Title	Units
MT 110	CNC G Code	4.0
WLDT 307	G.M.A.W. Welding	3.0
WLDT 308	T.I.G. Welding	3.0
WLDT 312	Pipe Fitting & Welding	3.0
WLDT 315	Metal Fabrication	4.0
WLDT 330	Welding Certification	3.0
WLDT 331	Advanced Welding Certification Lab	2.0
WLDT 370	SkillsUSA	3.0

Recommended electives:

Course Number	Course Title	Units
WLDT 199	Special Topics in Welding Technology	0.5 - 3.0 units
WLDT 305	Welded Sculptural Projects	1.0

A total of 31 units is required for the certificate.