

2024-2025 TTC Catalog

General Technology - Welding

Associate in Applied Science in General Technology

Welding Career Path

69-74 Credit Hours

The General Technology major allows students to select course work necessary to become multi-skilled technicians. In addition to completing the college's core curriculum, students also complete course work in at least two technical areas. The following is an example of a career path available. The secondary paths may be substituted for courses in other programs' primary path. Interested students should talk with their advisors.

The welding career path prepares students for entry level employment in the welding career field, which includes manufacturing, construction, transportation, fabrication, inspection and sales. The program provides students with an overview of various welding processes and applications as well as knowledge in the areas of welding metallurgy, weld quality, print reading and welding safety.

Students can earn only one General Technology degree in a single career path.

General Education Core Requirements

ENG 101 English Composition I 3

SPC 205 Public Speaking 3

or

SPC 209 Interpersonal Communication 3

REQ HUM	Select from	3
	Humanities	

REQ MAT	Select from	3
	Mathematics/	
	Natural Sciences	

REQ SSC	Select from	3
	Behavioral/Social	
	Sciences	

Total: 15

Primary Technical Specialty - Shielded Metal Arc Concentration Group

Select any two concentration groups for the Primary Technical Specialty

WLD 111 Arc Welding I 4

WLD 114 Advanced Arc Welding 1

WLD 145 Field Welding 2

WLD 170 Qualification Welding 4

WLD 226 Arc Welding Pipe II 1
WLD 222 Advanced Fabrication Welding 4
or
WLD 225 Arc Welding Pipe I 4

Total: 16

Primary Technical Specialty - Gas Metal Arc & Flux Cored Arc Concentration Group

Select any two concentration groups for the Primary Technical Specialty.

WLD 118 Gas Metal Arc Welding Ferrous I 4
WLD 119 Gas Metal Arc Welding Ferrous II 1
WLD 120 Flux Cored Arc Welding I 4
WLD 123 Gas Metal Arc Welding Non-Ferrous II 1
WLD 232 Gas Metal Arc-Flux Cored Arc Welding Pipe II 2
WLD 150 Specialized Welding 4
or
WLD 231 Gas Metal Arc and Flux Cored Arc Welding Pipe I 4

Total: 16

Primary Technical Specialty - Gas Tungsten Arc Concentration

Select any two concentration groups for the Primary Technical Specialty.

WLD 132 Inert Gas Welding Ferrous 4
WLD 133 Inert Gas Welding Ferrous Tubing 1
WLD 137 Inert Gas Welding Aluminum Tubing 1
WLD 152 Tungsten Arc Welding 4
WLD 228 Inert Gas Welding Pipe I 4
WLD 229 Inert Gas Welding Pipe II 2

Total: 16

Additional Requirements

WLD 110 Welding Safety and Health 1
WLD 127 Structural Blueprints I 3
WLD 141 Weld Quality 2
WLD 201 Welding Metallurgy 2
WLD 203 Structural Blueprints II 2

Total: 10

Secondary Technical Specialty

Take 12 - 17 additional credit hours from the following subject areas to meet the requirements for an associate degree. Twelve credit hours can be applied to a secondary technical specialty and five credit hours can be applied to a third specialty, if applicable. All secondary studies must be approved by your academic advisor.

Secondary Technical Specialty Optional Course
WLD 240 Robotic Welding and Manufacturing 4

Secondary Technical Specialty Programs

Air Conditioning and Refrigeration

Automotive Technology

Business Administration

Commercial Truck Driving

Electrical Line Worker

Electrician: Automation, Construction and Industrial

Engineering Design Graphics

Industrial Maintenance

Machine Tool Technology

Mechatronics

Total: 12-17

Admission Requirements

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.