WELDING AAS (94-101 CREDITS)

2023-24 Catalog Addendum (4/8/2025)

Allows WELD 295 to substitute for WELD 292) in both AAS and CoC

CIP Code

48.0508

- 6 quarter AAS with an optional 7th quarter certification
- Maximum class size: 18
- Student to teacher ratio: 18:1
- Enrollment point: Fall, Winter, Spring, Summer
- This program offers online, hybrid, web-enhanced, and face-to-face courses. Please see course descriptions for more information.
- Students in this program will use welding machines for most processes. They will also learn to use ventilation, air compressors, welding booths, oxy/fuel torches, plasma tables, track burning ops, and forklift operation.
- Both day and evening courses are offered as well as various welding certificates.
- Students will be responsible for purchasing their own welding hood, leather boots, leather jacket, leather gloves. For complete list, see instructors.

Required Courses

Core Courses

WELD 101	Safety Principles		2
WELD 104	Oxyacetylene Cutting		3
WELD 105	Introduction to Shielded Metal Arc Welding		5
WELD 114	Introduction to Flux Core Arc Welding		4
WELD 115	Flux Core Arc Welding - Full Penetration		5
WELD 117	Welding Symbols		5
WELD 201	Introduction to Gas Tungsten Arc Welding		5
WELD 202	Gas Tungsten Arc Welding - Full Penetration		5
WELD 203	Gas Tungsten Arc Welding - Aluminum		5
WELD 204	Welding Certification Testing - SMAW		5
WELD 205	Advanced Welding Applications - Pipe/SMAW		5
WELD 206	Advanced Welding Applications - Pipe/GTAW		5
WELD 207	Welding Certification Testing - Flux Core		5
WELD 208	Non-destructive Testing		2
WELD 210	Advanced Welding Applications - Project		5
WELD 292	Independent Projects	Or WELD 295 (5 credits)	1-5
Total Credit Hours:			**67-71**

Required: students choose between SMAW or Wire Certificates

SMAW Certificate (15 Credits)

WELD 108	Full Penetration Welds - Flat/Horizontal	5
WELD 109	Full Penetration Welds - Vertical/Overhead	5
WELD 110	Full Penetration Welds - Open Root	5
Total Credit Hours:		**15**

Wire Certificate (12 Credits)

WELD 111	Introduction to Gas Metal Arc Welding	3
WELD 112	Gas Metal Arc Welding - Full Penetration	4

WELD 113	Gas Metal Arc Welding - Aluminum	5
Total Credit Hours:		**12**

General Education Requirements

Communications (5 Credits Required)

ENGL 175	Professional Writing	5
ENGL& 101	English Composition I	5
ENGL& 235	Technical Writing	5
Total Credit Hours:		**5**

Quantitative (5 Credits Required)

MATH 171	Technical Math	5
MATH 172	Business Math	5
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II	5
MATH& 146	Statistics	5
MATH& 151	Calculus I	5
MATH& 152	Calculus II	5
MATH& 153	Calculus III	5
Total Credit Hours:		**5**

Humanities/Social Sciences/Natural Sciences/Other (5 Credits Required)

BIOL& 160	General Biology	5
BIOL& 175	Human Biology with Lab	5
BIOL& 241	Human Anatomy and Physiology I	5
BIOL& 242	Human Anatomy and Physiology II	5
BIOL& 260	Microbiology	5
BUS& 201	Business Law	5
BUS& 101	Introduction to Business	5
CHEM& 121	General Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 102	Introduction to Mass Media	5
CMST 152	Intercultural Communication	5
CMST& 210	Interpersonal Communication	5
CMST& 220	Public Speaking	5
CMST& 230	Small Group Communications	5
CMST& 240	Culture & Diversity in Health Care	5
ECON& 201	Microeconomics	5
ECON& 202	Macroeconomics	5
HIST 101	A History of Science and Technology	5
HIST& 146	United States History I	5

HIST& 147	United States History II	5
HIST& 148	United States History III	5
HUM& 101	Introduction to Humanities	5
NUTR& 101	Intro to Nutrition	5
PHYS& 114	Introductory Physics I (Algebra based Physics)	5
PHYS& 221	Engineering Physics I w/LAB	5
PHYS& 222	Engineering Physics II w/LAB	5
PHYS& 223	Engineering Physics III w/LAB	5
POLS& 101	Introduction to Political Science	5
PSYC& 100	General Psychology	5
PSYC& 200	Lifespan Psychology	5
SOC& 101	Introduction to Sociology	5
Total Credit Hours:		**5**

Note: See a Career Advisor prior to choosing courses that meet general education requirements.

TOTAL CREDIT HOURS: 94-101

WELDER CERTIFICATE OF COMPETENCY (94-101 CREDITS)

CIP Code

48.0508

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WELD 204	Welding Certification Testing - SMAW	
WELD 205	Advanced Welding Applications - Pipe/SMAW	5
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