

AAS, MANUFACTURING TECHNOLOGIES, WELDING

Program Description

The Associate of Applied Science, Manufacturing Technologies, Welding gives the student the training necessary to earn the American Welding Society structural steel certifications, which are required for employment in most areas of the construction and manufacturing fields involving welding, along with the general education requirements and employability skills that are sought after by all employers in the construction and manufacturing trades.

Recommended Course Schedule

	Units
1st semester	
Communications/English ³	3
Elective ³	3
DFT 110 Print Reading for Industry	3
OSH 222 General Industry Safety	1
WELD 211 Welding I	3
WELD 212 Welding I Practice	2
Semester Total	15
2nd semester	
Communications/English ³	3
Elective ³	6
MPT 140 Quality Control	3
WELD 221 Welding II	3
WELD 222 Welding II Practice	2
Semester Total	17
3rd semester	
Humanities/Diversity ³	3
IS 101 Introduction to Information Systems	3
U.S. and Nevada Constitutions ²	3
WELD 231 Welding III	3
WELD 232 Welding III Practice	2
Semester Total	14
4th semester	
Elective ³	6
Science ³	3
WELD 241 Welding IV	3
WELD 242 Welding IV Practice	2
Semester Total	14
Total Units	60

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See approved General Education list for the AAS Degree. (<http://catalog.tmcc.edu/degrees-certificates/general-education/aas/>)

³

See program recommendations or requirements.

AAS degrees are generally non-transfer degrees that are designed for students to enter the workforce.

To earn an AAS degree, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 units within the college.
3. Satisfy General Education requirements for the AAS (<http://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).
4. Have no financial or library obligation to the college.

Code	Title	Units
General Education Requirements		
<i>Diversity</i> ¹		[3]
Recommended:		
AAD 201	History of the Built Environment	
<i>Communications/English</i>		6
Recommended:		
ENG 101	Composition I	
or ENG 100	Composition Enhanced	
or ENG 113	Composition I for International and Multilingual Students	
ENG 107	Technical Communications I	
<i>Fine Arts/Humanities/Social Science</i>		3
Recommended:		
AAD 201	History of the Built Environment	
<i>Human Relations</i> ¹		[3]
Requirement is satisfied through embedded curriculum in the following courses:		
MPT 140	Quality Control	
OSH 222	General Industry Safety	
WELD 211	Welding I	
WELD 212	Welding I Practice	
WELD 221	Welding II	
WELD 222	Welding II Practice	
<i>Mathematics</i> ¹		[3]
Requirement is satisfied through embedded curriculum in the following courses:		
DFT 110	Print Reading for Industry	
MPT 140	Quality Control	
WELD 211	Welding I	
WELD 212	Welding I Practice	
WELD 221	Welding II	
WELD 222	Welding II Practice	
<i>Science</i>		3
Recommended:		
MTT 150	Metallurgy I	
<i>U.S. and Nevada Constitutions</i>		3
Degree Requirements		
DFT 110	Print Reading for Industry	3
MPT 140	Quality Control	3
OSH 222	General Industry Safety	1
Emphasis Requirements		
IS 101	Introduction to Information Systems	3
WELD 211	Welding I	3
WELD 212	Welding I Practice	2

WELD 221	Welding II	3
WELD 222	Welding II Practice	2
WELD 231	Welding III	3
WELD 232	Welding III Practice	2
WELD 241	Welding IV	3
WELD 242	Welding IV Practice	2
Elective Requirements		
Select 15 units from the following:		15
ELM 110	Electrical/Electronic Circuits	
MTT 101	Introduction to Machine Shop	
MTT 105	Machine Shop I	
MTT 150	Metallurgy I	
WELD 101	Basic Metals	
WELD 215	Introduction to Welding Fabrication Techniques	
WELD 225	Independent Study	
WELD 250	Welding Certification Preparation	
WELD 280	Introduction to Robotic Welding	
WELD 290	Internship in Welding	
Total Units		60

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Course may also count toward degree requirements. Please consult with Academic Advisement.

Students completing the degree will:

- Be proficient in four major welding processes and prepared for industry-standard certification.
- Identify and explain technical drawings and apply print reading techniques required in the welding industry.
- Consistently demonstrate safe and proper use of welding equipment, power tools, and accessories in the performance of welding and joinery.