

WELDING TECHNOLOGY (AAS)

Catalog Effective Term: Fall 2024

Program Code: APWLDF

Credential: Associate in Applied Science

High Demand Occupation, High Wage Occupation

The Welding Technology program offers specialized welding and fabrication instruction through theoretical, practical and technical learning objectives and strategies. The core curriculum specializes in welding and fabrication and delves into the expanses of welding technology as a whole. Students are first introduced to welding, cutting and fabrication safety; theory and fundamentals; and then transition to more advanced welding and fabrication processes and application, such as weld quality, inspection testing and repair techniques and automated welding and cutting systems and operations. Students who successfully complete this program will have learned a diverse skillset giving them opportunities to enter the workforce as entry-level welders, fabricators, field technicians and positions them for higher learning in welding engineering, welding education or materials science.

Articulation

- Eastern Michigan University, several BS degrees
- Pennsylvania College of Technology, BS degree
- Wayne State University, several BS degrees

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: <http://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php>.

Minimum Credits Required for the Program: 66

Full-Time Students

Course	Title	Credits
First Semester		
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
WAF 106	Welding Print Reading	3
WAF 109	Welding Safety and OSHA Regulations	2
WAF 125	Introduction to Welding Processes I	2
WAF 126	Introduction to Welding Processes II	2
Math Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#math)		3
Credits		14
Second Semester		
WAF 130	Shielded Metal Arc Welding (SMAW)	4
WAF 131	Thermal Cutting, Gouging and Weld Repair	3
WAF 139	Basic Metal Fabrication	3
WAF 140	Inspection and Testing	3
Credits		13
Third Semester		
WAF 230	Advanced Shielded Metal Arc Welding (SMAW)	4
WAF 231	Gas Tungsten Arc Welding (GTAW)	4
WAF 232	Semi-Automatic Welding Processes	4

Writing Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#writing)		3
Credits		15
Fourth Semester		
WAF 150	Automated Welding and Cutting	3
WAF 210	Welding Metallurgy	3
WAF 233	Submerged Arc and Flux Core Arc Welding	3
Speech/Comp. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#writing)		3
Credits		12
Fifth Semester		
Arts/Human. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#arthuma)		3
Nat. Sci. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci)		3
Soc. Sci. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci)		3
WAF 239	Advanced Metal Fabrication	3
Credits		12
Total Credits		66

Part-Time Students

Course	Title	Credits
First Semester		
WAF 109	Welding Safety and OSHA Regulations	2
WAF 125	Introduction to Welding Processes I	2
WAF 126	Introduction to Welding Processes II	2
Credits		6
Second Semester		
WAF 106	Welding Print Reading	3
WAF 131	Thermal Cutting, Gouging and Weld Repair	3
Credits		6
Third Semester		
WAF 139	Basic Metal Fabrication	3
Writing Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#writing)		3
Credits		6
Fourth Semester		
WAF 130	Shielded Metal Arc Welding (SMAW)	4
Math Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#math)		3
Credits		7
Fifth Semester		
NCT 120	Introduction to 2D CAD CAM Programming and Applications	2
WAF 140	Inspection and Testing	3
WAF 230	Advanced Shielded Metal Arc Welding (SMAW)	4
Credits		9
Sixth Semester		
Soc. Sci. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci)		3

Speech/Comp. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#writing)	3
Credits	6
Seventh Semester	
WAF 231 Gas Tungsten Arc Welding (GTAW)	4
WAF 232 Semi-Automatic Welding Processes	4
Credits	8
Eighth Semester	
WAF 150 Automated Welding and Cutting	3
WAF 210 Welding Metallurgy	3
WAF 233 Submerged Arc and Flux Core Arc Welding	3
Credits	9
Ninth Semester	
WAF 239 Advanced Metal Fabrication	3
Arts/Human. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#arthuma)	3
Nat. Sci. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci)	3
Credits	9
Total Credits	66