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# WELDING AND FABRICATION ADVANCED APPLICATIONS (ADVANCED CERTIFICATE)

Catalog Effective Term: Fall 2024
Program Code: CVWLDN
Credential: Advanced Certificate

High Demand Occupation, High Wage Occupation

This advanced certificate combines welding fundamentals with more complex welding, cutting and fabrication techniques and applications aimed to further develop one's skills and core competencies. Students focus on welding using processes and positions common in industry, perform destructive and non-destructive testing, identify weld failures and perform root cause analysis, executive repair techniques, perform advanced fabrication techniques and execute automated welding and cutting programming and operations. Students who successfully complete this advanced certificate will have learned a broad range of essential skillsets critical to the trade and how to apply those skills to manufacturing, automotive, construction, aerospace, oil, military industry, gas and power industries.

## **Articulation**

Eastern Michigan 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/articulationagreements.php.

# **Program Admission Requirements**

- Successful completion of the Welding and Fabrication Principles Certificate (CTWLDS).
- A Math Level of 2 is required to enroll in WAF 233 Submerged Arc and Flux Core Arc Welding and WAF 239 Advanced Metal Fabrication.

### Minimum Credits Required for the Program: 24

Code	Title	Credits
Major/Area Requirements		
WAF 150	Automated Welding and Cutting	3
WAF 210	Welding Metallurgy	3
WAF 230	Advanced Shielded Metal Arc Welding (SMAW)	4
WAF 231	Gas Tungsten Arc Welding (GTAW)	4
WAF 232	Semi-Automatic Welding Processes	4
WAF 233	Submerged Arc and Flux Core Arc Welding	3
WAF 239	Advanced Metal Fabrication	3
Total Credits		24