

# WELDING - SMAW WORKFORCE TRAINING CERTIFICATE

---

Program website (<https://frederick.edu/programs/skilled-trades/welding.aspx>)

**Program Manager:** Nick Morgan  
**Email:** nmorgan@frederick.edu  
**Phone:** 240.629.7902

## Program Description

This series of courses provides students with a broad range of knowledge and skills needed for welding and cutting metal, with a focus on Shielded Metal Arc Welding (SMAW). Topics include basic metallurgy, electrode selection, welding symbols and blueprint reading, and setting equipment parameters. Students will prepare for and test in the SMAW Qualification and Certification (Hobart #37), American Welding Society D1.1 test, and Structural Steel 2-G and 3-G tests.

## Program Requirements

| Code                               | Title   | Credits |
|------------------------------------|---|---------|
| <b>Required Course/s</b>           |   |         |
| WLD 160                            | Introduction to Welding                         |         |
| WLD 172                            | Welding Symbols and Blueprint Reading           |         |
| WLD 175                            | Advanced Welding: SMAW                          |         |
| <b>Prerequisites/Co-requisites</b> |   |         |
| ENGL 70                            | Introduction to College Reading and Writing     |         |
| or ENGL 75                         | Reading and Writing in the Academic Disciplines |         |
| or ESOL 100                        | English for Academic Purposes                   |         |