

# WELDING FABRICATION

## CERTIFICATE (C)

DESCRIPTION: This one-year certificate program prepares the successful graduate for entry level employment as a general purpose welder, structural steel welder, or welding fabricator. Skills taught in the program include cutting techniques, plate and structural steel fabrication, pipe welding, non-ferrous welding, aluminum and stainless steel, fixture design, CNC plasma cutting, and arc welding procedures. Students are required to complete a welding fabrication project job in which they design, estimate costs, fabricate, and weld project assemblies. Students enrolled in this certificate program will be prepared to take the American Welding Society (AWS) Level I and Level II welding certification tests.

BASIC PROGRAM REQUIREMENTS		CREDITS: 31
CAD 150	3D MODELING (3/4) <sup>A</sup>	
MET 200	MATERIAL SCIENCE (3/4) <sup>A</sup>	
MFG 101	MACHINING PROCESSES I (4/6) <sup>A</sup>	
MFG 120	PRINT INTERPRETATION & PROCESSES (3/4) <sup>A</sup>	
MTH 110	TECHNICAL MATH I (3/4)	
WLD 123	SMAW WELDING PROCESSES (4/6) <sup>A</sup>	
WLD 124	GMAW & FCAW WELDING PROCESSES (4/6) <sup>A</sup>	
WLD 240	GAS TUNGSTEN ARC & PIPE WELDING (4/6) <sup>A</sup>	
WLD 242	WELDING FABRICATION (3/5) <sup>A</sup>	

**MINIMUM 31 CREDIT HOURS/45 CONTACT HOURS**

### NOTES:

<sup>A</sup> Included in occupational specialty.

*GPA of 2.0 or higher must be maintained in occupational specialty courses*

Students with current American Welding Society (AWS) Entry Level Welder (Level I) and/or AWS Advanced Welder (Level II) certification, or students with a current AWS D1.1/2015 Structural Welding certification will receive credit for the applicable welding course(s). See program advisor for details.

# WELDING FABRICATION

## CERTIFICATE (C)

### SUGGESTED SEQUENCE OF COURSES

Year 1 (Fall Semester)		Credits: 17
WLD 123	SMAW WELDING PROCESSES (4/6)	
MET 200	MATERIAL SCIENCE (3/4)	
MFG 101	MACHINING PROCESSES I (4/6)	
MFG 120	PRINT INTERPRETATION & PROCESSES (3/4)	
MTH 110	TECHNICAL MATH I (3/4)	

YEAR 1 (SPRING SEMESTER)		CREDITS: 14
CAD 150	3D MODELING (3/4)	
WLD 124	GMAW & FCAW WELDING PROCESSES (4/6)	
WLD 240	GAS TUNGSTEN ARC & PIPE WELDING (4/6)	
WLD 242	WELDING FABRICATION (3/5)	