

## Robotic Welding CERTIFICATE

### Program Overview

Professional fabricators and CNC operators are highly skilled individuals who excel in math, geometry, formulations, programming, critical thinking and blueprint reading. Physical requirements include good eyesight, good hand and eye coordination, standing for long periods of time and the ability to perform heavy, physical work.

Robotic welding is an exciting and growing part of the welding profession. Robotic tools can automate some high production applications, such as resistance spot welding and arc welding.

Students must be a graduate of the Welding Technology Diploma (WLDG) or have instructor approval.

### Career Opportunities

Fabricators and CNC operators work in manufacturing plants as production welders, specialist welders, layout engineers, press brake and CNC operators both in structural and non-structural settings. Welding/fabricating is widely used in the aircraft, automotive, heavy equipment, sheet metal, and other trades that use fabrication and CNC equipment.

### Program Outcomes

1. Graduates will have the knowledge and skills in setup and break-down procedures of CNC equipment including press brake, CNC plasma cutting and robotic welding.
2. Graduates will have knowledge and skills in sheet metal bend deduction formulation.
3. Graduates will have acquired supervised hands-on experience in using various welding and finishing processes and fabrication equipment.
4. Graduates will be prepared for employment in the welding industry and related fabrication fields.

### Program Faculty

Todd Hankel  
todd.hankel@saintpaul.edu

Caleb Paulson  
caleb.paulson@saintpaul.edu

### Supply Costs

Estimated cost for student supplies \$520.

### Program Requirements

Students must have a Welding Diploma or instructor approval.

Check off when completed

Course	Cr
<input type="checkbox"/> WLDG 2500 2D CAD	2
<input type="checkbox"/> WLDG 2510 Safety	1
<input type="checkbox"/> WLDG 2520 CNC Plasma	2
<input type="checkbox"/> WLDG 2530 Press Brake Operations	3
<input type="checkbox"/> WLDG 2540 Robotic Welding Operations	3
<input type="checkbox"/> WLDG 2550 Industrial Equipment	2
<input type="checkbox"/> WLDG 2560 Layout Practices	4

**Total Program Credits . . . . . 17**

### Program Start Dates

Spring

### Course Sequence

The following sequence is recommended for a full-time student.

#### First Semester

WLDG 2500 2D CAD	2
WLDG 2510 Safety	1
WLDG 2520 CNC Plasma	2
WLDG 2530 Press Brake Operations	3
WLDG 2540 Robotic Welding Operations	3
WLDG 2550 Industrial Equipment	2
WLDG 2560 Layout Practices	4
<b>Total Semester Credits</b>	<b>17</b>

**Total Program Credits . . . . . 17**

### Minimum Program Entry Requirements

Students entering this program must meet the following minimum program entry requirements:

**Reading:** Score of 240+ or grade of "C" or better in READ 0721

**Writing:** Score of 225+

**Arithmetic:** Score of 237+

#### Assessment Results and Prerequisites:

Students admitted into Saint Paul College programs may need to complete additional courses based on assessment results and course prerequisite requirements. Certain MATH, READ, and ENGL courses have additional prerequisites.

350C

*Information is subject to change.  
This Program Requirements Guide is not a contract.*