Program Requirements Guide 2021-2022

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 Paulsoncaleb.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
☐ 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

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

Total Semester Credits .................... 17

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 or READ 0724 or EAPP 0860
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.

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