

Program Information

The Robotic and Laser Welding program will focus on robot and laser safety, programming, and operation. The Robotic and Laser Welding certificate will train students in the fundamentals of ABB, Fanuc and OTC robot programming and language. Laser welding will include the development and documentation of procedures and qualification of welds, and the calibration of equipment for welding. Laser cutting will focus on creating programs using CNC laser cutting equipment.

This program requires students to go full-time each semester students are required to take all courses.

Program Learning Outcomes

1. Demonstrate ability to operate robots and lasers safely.
2. Program robotic arc welders.
3. Develop weld schedules and edit weld programs.
4. Program and cut parts using CNC laser cutting equipment.
5. Develop laser welding and programs.
6. Document results of weld procedure and qualifications tests.

Industry and Career Outlook

Robotic and laser welding is expected to grow at a substantial rate in the coming years. Contributing factors to this growth includes demand for greater safety, improve productivity, and quality. With the combination of robotics and lasers, companies see an increased manufacturing speed, affordable materials, and better rates for their clients. This growing field will expand in many different areas including but not limited to automotive plants, machine shops, and global market.

Wage information is available from the Minnesota Department of Education and [Minnesota Department of Employment and Economic Development](#).

Certifications

The Welding program not only provides students with a thorough background in welding and related theory, but also prepares students with the knowledge and skills need to take a national certification examination.

- American Welding Society (AWS) Certified Robotic Welding Certification (CRAW)

Admission Requirements

Successful completion of the Basic Welding Certificate or instructor approval.

Start Dates

Fall Semester.....August
Spring Semester.....January

Course Prerequisites

Some courses in this program may require a prerequisite. Please see [course descriptions](#) for more details.

Program Sequence

First Semester	18
<input type="checkbox"/> WELD 2006 Welding Code Interpretation.....	2
<input type="checkbox"/> WELD 2100 Laser Cutting	2
<input type="checkbox"/> WELD 2110 Laser Welding	4
<input type="checkbox"/> WELD 2120 Welding Procedures	1
<input type="checkbox"/> WELD 2130 Fanuc Robotics	3
<input type="checkbox"/> WELD 2140 ABB Robotics.....	3
<input type="checkbox"/> WELD 2150 OTC Robotics	3

Graduation Requirements

Students must earn a cumulative 2.0 GPA or higher to be eligible for graduation from this program.

Faculty Contact

[Jay Gerdin](#)..... 763-576-4055
For information on how to apply, to schedule a tour, or for service during summer hours, contact Enrollment Services at 763-576-7710 or EnrollmentServices@anokatech.edu

Also see: Welding AAS, Welding Technology diploma, Basic Welding certificate, Fabricator certificate, Robotic and Laser Welding AAS, and Pipe Welder certificate