

Program Information

The Anoka Technical College Associate of Applied Science (AAS) degree in Welding is a 66-credit program designed for individuals seeking a well-rounded welding background. The Welding program consists of technical courses, specifically designed to develop exceptional welding skills utilizing the major welding processes that are vital to industry.

The technical courses are broken out into semester-long certificates to provide quick access into a welding career. The degree program also offers a balance of general education courses to complement the welding courses and to provide students with opportunity to capitalize on a broad-based welding education.

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

Program Learning Outcomes

- Students will weld to visual acceptance criteria per applicable American Welding Society standards in Gas Tungsten Arc Welding, Gas Metal Arc Welding and the Shielded Metal Arc Welding process.
- Students will prepare weld joints and perform welding operations using welding symbol information.
- Students will follow established procedures and policies regarding personal protective gear, shop safety and welding equipment.
- Students will visually examine all work for discontinuities and defects with the knowledge of industry specification.
- Students will work in a team environment and accept constructive criticism.
- Students will operate safely and proficiently using Oxy-fuel, Plasma and Carbon Air Arc equipment.
- Students will demonstrate the ability to weld to entry level standard per American Welding Society on carbon steel, stainless steel, and aluminum.

Career Opportunities

The diversification of the welding industry impacts virtually every industry around the globe. From the depth of the world's oceans to the far-reaching corners of outer space, there is a welding position for every hardworking, ambitious, smart individual who is ready and willing to constantly improve and strive for excellence. A career choice in welding offers a vast array of options for employment and continuing personal development. Welding is the most common way to permanently join metal parts. Heat is applied to the pieces that are being joined, melting and fusing them together which forms a permanent bond. Therefore, welding plays a key role in industry production lines, laboratories, research and development, national defense, sales and service, NASCAR and drag racing, custom motorcycle building, artwork, sculptures, pipelines, power plants, refineries, construction, maintenance, repair and much more.

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

Certification

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 needed to take three national certification examinations:

- American Society of Mechanical Engineers;
- American Petroleum Institute; and
- American Welding Society's Welding Code

Program Start Dates

Fall Semester.....August
Spring SemesterJanuary

Course Prerequisites

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

MnTC General Education Requirement

This program requires completion of the following fifteen credits of general education from at least three goal areas of the Minnesota Transfer Curriculum (MnTC). Refer to the [MnTC course list](#) for elective courses:

<input type="checkbox"/> MATH 1500 Mathematical Ideas (Goal 4)	3
<input type="checkbox"/> MnTC Electives	12

Program Sequence

First Semester (<i>Basic Welding Certificate</i>)	17
<input type="checkbox"/> WELD 1000 Blueprint 1- Lecture.....	1
<input type="checkbox"/> WELD 1001 Blueprint 1- Lab.....	1
<input type="checkbox"/> WELD 1002 Math for Welders	1
<input type="checkbox"/> WELD 1004 Oxy-Fuel Applications	1
<input type="checkbox"/> WELD 1006 Oxy-Fuel Processes	1
<input type="checkbox"/> WELD 1012 Processes and Power Sources I	3
<input type="checkbox"/> WELD 1014 Gas Tungsten Arc Welding I	3
<input type="checkbox"/> WELD 1018 Shielded Metal Arc Welding I	3
<input type="checkbox"/> WELD 1020 Gas Metal Arc Welding I-A	1
<input type="checkbox"/> WELD 1021 Gas Metal Arc Welding I-B	2
Second Semester (<i>Welding Technology Diploma</i>)	17
<input type="checkbox"/> WELD 1022 Blueprint Reading II	3
<input type="checkbox"/> WELD 1024 Metals Theory I	2
<input type="checkbox"/> WELD 1026 Processes and Power Source II	3
<input type="checkbox"/> WELD 1028 Gas Tungsten Arc Welding II	3
<input type="checkbox"/> WELD 1034 Gas Metal Arc Welding II	3
<input type="checkbox"/> WELD 1036 Shielded Metal Arc Welding II	3
Third Semester (<i>Welding Fabricator Certificate</i>)	17
<input type="checkbox"/> WELD 1209 Basic Pipe Welding	5
<input type="checkbox"/> WELD 2000 Basic Pipe Layout	3
<input type="checkbox"/> WELD 2004 Metals Theory II	3
<input type="checkbox"/> WELD 2006 Welding Code Interpretation	2
<input type="checkbox"/> WELD 2008 Blueprint Reading III	4
Fourth Semester	15
<input type="checkbox"/> MATH 1500 Mathematical Ideas.....	3
<input type="checkbox"/> MnTC Electives.....	12

(continued)

2022-2023

Welding

Associate of Applied Science (AAS) Degree

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
Rich Godeen	763-576-4122
Lisa Glendower	763-576-4086
David Vlasyuk	763-576-4257

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