

Program Information

The Anoka Technical College Welding Technology diploma is a 34-credit program (the 34 total credits include 17 credits from the Basic Welding certificate) specifically designed to develop exceptional welding skills utilizing the major welding processes that are vital to industry.

The Welding Technology diploma integrates theory with technical skills. Through the rigorous curriculum, students will develop fundamental knowledge of GMAW, GTAW, SMAW and Oxy fuel welding processes. Blueprint and math ability are incorporated in the coursework. Students will also learn metal comprehension, industry safety practices and related equipment applications.

Classes available at Anoka Technical College and Cambridge-Isanti High School.

Program Learning Outcomes

By completing this program, students will achieve the following learning outcomes.

1. 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.
2. Students will prepare weld joints and perform welding operations using welding symbol information.
3. Students will follow established procedures and policies regarding personal protective gear, shop safety and welding equipment.
4. Students will visually examine all work for discontinuities and defects with the knowledge of industry specification.
5. Students will work in a team environment and accept constructive criticism.
6. Students will operate safely and proficiently using Oxy-fuel, Plasma and Carbon Air Arc equipment.
7. Students will demonstrate the ability to weld to entry level standard per American Welding Society on carbon steel, stainless steel and aluminum

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 the national certification examination:

- American Welding Society's Welding Code

Course Prerequisites

None

Graduation Requirements

All Anoka Technical College students seeking an Associate in Applied Science (AAS), diploma, or certificate must meet the cumulative grade point average (GPA) of 2.0 or higher.

Transfer Opportunities

To see how credits from this program may transfer into other Anoka Technical College programs or into a program at another college, visit:

- [Minnesota Transfer](http://www.mntransfer.org/students/plan/s_agreements.php?numResults=25&archive=false&from_inst=70&from_prog=&to_inst=&Search=Search): (www.mntransfer.org/students/plan/s_agreements.php?numResults=25&archive=false&from_inst=70&from_prog=&to_inst=&Search=Search)
- [Anoka Technical College transfer student](http://www.anokatech.edu/BecomeStudent/Transfers.aspx): (www.anokatech.edu/BecomeStudent/Transfers.aspx)

Industry Information

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.

Wages/Outlook/Advancement

Welders and solderers can advance to more skilled jobs with additional training and experience. For example, experienced welders may become technicians, supervisors, inspectors, or instructors. Other experienced welders and solderers open their own repair shops.

Wage information is available from the Minnesota Department of Education and [Minnesota Department of Employment and Economic Development](https://mn.gov/deed/job-seekers/job-outlook/) (https://mn.gov/deed/job-seekers/job-outlook/).

Gainful Employment

Follow this link for a [Gainful Employment Report](#).

Technical Education: 34 Credits

<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 1008 Blueprint Reading I.....	2
<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 1016 Gas Metal Arc Welding I.....	3
<input type="checkbox"/> WELD 1018 Shielded Metal Arc Welding I.....	3
<input type="checkbox"/> WELD 1022 Blueprint Reading II	3



(continued)

2019-2020

Welding Technology

Diploma

- WELD 1024 Metals Theory I..... 2
- WELD 1026 Processes and Power Sources II 3
- WELD 1028 Gas Tungsten Arc Welding II..... 3
- WELD 1034 Gas Metal Arc Welding II..... 3
- WELD 1036 Shielded Metal Arc Welding II 3

Also see: Welding AAS, Basic Welding certificate, Welding Fabricator certificate, and Pipe Welding certificate

Start Dates

Fall Semester.....August
 Spring SemesterJanuary

Faculty Contact

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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

Sample Program Sequence

Full Time

	First Semester	Second Semester
1st YEAR	WELD 1002 1	WELD 1022 3
	WELD 1004 1	WELD 1024 2
	WELD 1006 1	WELD 1026 3
	WELD 1008 2	WELD 1028 3
	WELD 1012 3	WELD 1034 3
	WELD 1014 3	WELD 1036 3
	WELD 1016 3	TOTAL 17
	WELD 1018 3	
	TOTAL 17	



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