Welding Technology
Diploma

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.

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

Program Learning Outcomes
By completing this program, students will achieve the following 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.

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

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
• Anoka Technical College Transfer Student

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 Employment and Economic Development.

Locations
Anoka Technical College

Start Dates
Fall Semester..........................................................August
Spring Semester.....................................................January

Technical Education: 34 Credits

<table>
<thead>
<tr>
<th>First Semester (Basic Welding Certificate)</th>
<th>Credits</th>
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<tbody>
<tr>
<td>WELD 1000 Blueprint 1- Lecture......................1</td>
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<tr>
<td>WELD 1001 Blueprint 1- Lab............................1</td>
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<tr>
<td>WELD 1002 Math for Welders............................1</td>
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<tr>
<td>WELD 1004 Oxy-Fuel Applications......................1</td>
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<tr>
<td>WELD 1006 Oxy-Fuel Processes.........................1</td>
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<tr>
<td>WELD 1012 Processes and Power Sources I..............3</td>
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<tr>
<td>WELD 1014 Gas Tungsten Arc Welding I...............3</td>
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<tr>
<td>WELD 1018 Shielded Metal Arc Welding I.............3</td>
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<tr>
<td>WELD 1020 Gas Metal Arc Welding I-A...............1</td>
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<tr>
<td>WELD 1021 Gas Metal Arc Welding I-B.................2</td>
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### Second Semester (Welding Technology Diploma) ............................. 17
- **WELD 1022**  Blueprint Reading II ........................................ 3
- **WELD 1024**  Metals Theory I .................................................. 2
- **WELD 1026**  Processes and Power Source 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

#### Faculty Contact

**Jay Gerdin**  ........................................................................ 763-576-4055  
**Rich Godeen** ................................................................. 763-576-4122  
**Lisa Glendower** ............................................................. 763-576-4086

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