Welding and Fabrication Technology

SCHOOL OF MANUFACTURING & AUTOMATION

Overview

Learn how to weld and become a well-informed tradesperson with a comprehensive understanding of the industry's processes and tools.

The Welding and Fabrication Technology program provides an integrated learning experience, combining theoretical knowledge with practical, hands-on skills in a blend of classroom and lab work. The program aligns with the Alberta Apprenticeship and Industry Training (AIT) curriculum for the welding trade.

You will learn from faculty with real-world experience who will provide industry insights and mentorship. You'll have access to modern welding facilities and equipment and networking opportunities with industry professionals and potential employers.

As a student, you will:

- learn industry-standard welding processes and tools, including for aluminum, steel or other metals
- learn how to interpret complex drawings, adhere to strict standards and specifications, and keep current with welding codes
- learn welding and metal fabrication procedures using the latest and emerging technologies in the field
- gain business and entrepreneurship skills for effective decision-making, job planning, tool and material selection, and operational sequencing
- gain mathematical and communication abilities for interacting with various stakeholders and accurately estimating project materials and resources.

Become a journeyperson welder

This program offers an alternate route to traditional apprenticeship, providing the foundational knowledge necessary for the trade. It prepares you to be apprenticeship-ready, needing only to register with an employer to begin accumulating on-the-job hours towards a journeyperson welder certification and pass the applicable exams.

If you seek a comprehensive welding and fabrication education or want to enhance your employability in the industry or manufacturing sector, the Welding and Fabrication Technology program can help you get there.

Traits, skills and aptitudes

Those in the welding field tend to be objective, methodical and innovative.

You need:

- manual dexterity
- good vision (corrective lenses are acceptable)
- good hand-eye coordination
- attention to detail
- patience.

You should enjoy building things and working with little direction or supervision.

Practicum, Co-op and Work Integrated Learning

The optional cooperative work term between years one and two allows you to apply your classroom learning in the workplace, gain valuable industry experience and complete some of the hours required to earn your journeyperson designation.

Please note: International students are not eligible to register in or participate in optional work-integrated learning opportunities, as optional placements do not meet current IRCC requirements for student work placements.

Accreditations, designations and certifications

This program aligns with the Alberta Apprenticeship and Industry Training (AIT) curriculum for welders.

Graduates are eligible to challenge the technical training exams for periods one through three. Upon passing, you can register as an apprentice and complete the on-the-job training hours to earn your journeyperson designation.

Credentials

Upon successful completion of this program, you'll receive a SAIT Welding and Fabrication Technology diploma.

Admission requirements

Applicants educated in Canada

Applicants must demonstrate English language proficiency and meet the following requirements or equivalents:

- at least 50% in English Arts 20-1 or English Arts 20-2, and
- at least 50% Math 20-1, Math 20-2 or Math 20-3, and
- at least 50% Science 10.

Those who have graduated from SAIT's Welding Technician certificate program within the last five years may be given advanced standing into year two or the program, depending on seat availability.

SAIT accepts high school course equivalents for admission for applicants educated outside Alberta.

Applicants educated outside of Canada

All applicants who were educated outside of Canada must demonstrate English language proficiency and provide proof they meet the program admission requirements with an international document assessment. Find accepted educational documents and assessment options.

SAIT may also accept courses completed at certain international post-secondary institutions.

Costs

2026/27 tuition and fees

The following estimated costs are effective as of July 1, 2026.

The estimated total cost of tuition and fees is based on the suggested schedule of study. Following a modified schedule will impact the fees you pay per semester and may alter final costs.

Domestic Students

Year	Number of semesters	Tuition fees	Additional fees	Total per year
1	2	$11,340	$1,764.50	$13,104.50
2	2	$11,340	$1,764.50	$13,104.50
			Total cost:	**$26,209**

The estimated total cost of tuition and fees for domestic students is based on the recommended course load per year.

International Students

The program total is based on the estimated amount you will pay if you enter this program during the 2026/27 academic year. The program total amount listed on your letter of admission may appear higher. This amount is your maximum tuition guarantee for the program. SAIT will not exceed this maximum, regardless of changes in tuition and fees between academic years.

Year	Number of semesters	Tuition fees	Additional fees	Total per year
1	2	$20,250	$1,764.50	$22,014.50
2	2	$20,250	$1,764.50	$22,014.50
			Total cost:	**$44,029**

The estimated total cost of tuition and fees for international students is based on the recommended course load per year.

Books and Supplies

Books and supplies are approximately $2,000 per full-time year.

This is a bring-your-own-device program with a standard computer hardware and software requirement. See the specific requirements on our computers and laptops page.

Find your booklist on the SAIT Bookstore's website. The booklist will be available closer to the program start date. Can't find your program or course? The bookstore didn't receive a textbook list. Contact your program directly to determine if they're still refining course details or if you're in luck; no textbook purchase is required this term.