Pre-employment Welding

SCHOOL OF MANUFACTURING & AUTOMATION

Overview

The Pre-Employment Welding program is designed to help you kick-start your career in welding.

Whether you're aiming to work in Alberta's thriving oil and gas industry or seeking opportunities in construction and manufacturing, this program provides the foundational skills necessary for entry-level positions and beyond.

You'll learn to join, shape and cut metal parts for various applications, from pressure vessels to industrial components. You will focus on skills pertinent to Alberta's oil service, pipeline and construction sectors.

Benefit from a mix of in-class theory, hands-on labs and extensive self-guided study to reinforce learning.

In this program, you will:

- learn wire feed welding, joint and weld types, identification of weld faults, and operation of oxyfuel equipment
- develop practical skills in welding techniques including Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW) and Metal Cored Arc Welding (MCAW)
- become proficient in oxyfuel cutting and gain an understanding of the oxyfuel process and safety
- adopt safe work practices throughout all aspects of welding.

You will learn from faculty with real-world experience to provide industry insights and mentorship, gain hands-on experience with current welding technologies and equipment, and get exposure to a network of industry and trade contacts and potential employers.

Upon completing this program, you will be eligible to challenge the written and practical exams for the first-period welding apprenticeship, fast-tracking your journey to becoming a journeyperson welder.

Work conditions for welders vary from one job to another. Welders may work outdoors on construction sites or indoors in production and repair shops. Travel may also be required for jobs such as oilfield-related welding. A 40-hour workweek is typical, but overtime is occasionally required to meet project deadlines.

If you're looking for a solid start in the welding profession, are self-driven in your approach to learning, and are committed to personal study, then this program is for you.

Traits, skills and aptitudes

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

You need:

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

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

SAIT program pathways

This program aligns with the first period of Alberta Apprenticeship and Industry Training's (AIT) Welder curriculum.

Graduates may be eligible to register as apprentices and challenge the first-period exam.

Once you pass the exam and complete the necessary training hours with an employer, you may register for SAIT's Welder apprenticeship program beginning in period two.

Credentials

Upon successful completion of the program, you'll receive a SAIT Pre-Employment Welding certificate.

Admission requirements

Applicants educated in Canada

Applicants must demonstrate English language proficiency and completion of the following courses or equivalents:

- Math 10C or Math 10-3, and
- English Language Arts 10-1 or English Language Arts 10-2.

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 completing the program within 13 weeks. 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	0.5	$6,705	$172.50**	$6,877.50
			Total cost:	**$6,877.50**

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

**Students in this program do not qualify for the UPass or health and dental plans, nor do they pay Saitsa fees.

Books and Supplies

Books and supplies are approximately $1,000 - $1,500 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.

Required equipment/tools

Tools will be provided.

Required personal protective equipment (PPE)

You'll need CSA-approved steel-toe boots and safety glasses, welding gloves, earplugs (provided), a good-quality welding helmet, and FR coveralls or a welding jacket.

We recommend you hold off purchasing your equipment until after you begin classes. The industry-approved PPE will be discussed during your first few days.