Pre-Employment Machinist

SCHOOL OF MANUFACTURING & AUTOMATION

Overview

Embark on a fulfilling career as a machinist, playing a pivotal role in manufacturing and repairing parts and components critical to industries such as manufacturing, transportation, energy and healthcare.

This comprehensive 15-week Pre-employment Machinist program combines hands-on shop experience with theoretical knowledge curated by industry experts to address the unique demands of manufacturing environments.

In this program, you will:

- receive rigorous training in standard safety protocols
- master the mathematical concepts and calculations essential for precision machining
- learn to operate computer numerical control (CNC) machines, understand programming and execution
- gain proficiency in using lathes for cutting, sanding, drilling, facing and turning
- acquire skills in operating drill presses for producing accurate holes in metal
- learn milling, grinding and other machining techniques.

Once you graduate, you'll possess the foundational skills to gain employment and register as an apprentice, positioning you ahead in the competitive field of machining.

With this program, you're not just learning a trade - you're setting the stage for a career as a machinist.

Traits, skills and aptitudes

Machinists tend to be objective, innovative and methodical.

You need:

- mechanical aptitude
- critical thinking and problem-solving skills
- the ability to use your hands skillfully and quickly
- the ability to estimate and measure sizes and distances accurately
- the ability to work alone on tasks that require concentration and physical effort.

You should enjoy doing creative work with machinery that requires a high degree of skill and precision.

SAIT program pathways

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

Graduates are 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 Machinist apprenticeship program beginning in period two.

Graduates are also eligible to receive course credit for all first-semester classes in our Machinist Technology diploma program.

Credentials

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

Admission requirements

Applicants educated in Canada

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

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

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 12 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	1.0*	$7,006.50	$525.25	$7,531.75
			Total cost:	**$7,531.75**

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

*Less than one full semester of 16 weeks.

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.