Pre-employment Industrial Mechanic Millwright

SCHOOL OF MANUFACTURING & AUTOMATION

Overview

Jumpstart your journey into the high-demand field of industrial mechanics with our intensive 12-week Pre-employment Industrial Mechanic (Millwright) program.

Designed as a streamlined alternative to the first period of traditional apprenticeship, this program covers the foundational course materials that a first-year apprentice would encounter.

In this program, you will:

- learn about machining, machine assembly, blueprint reading, rigging and hoisting, machine alignment, drive systems, and the application of precision measurement tools and testing equipment
- engage in practical training to install, troubleshoot, repair and maintain a diverse range of industrial machinery
- acquire the hands-on skills and technical knowledge that prepare you for various positions and responsibilities within the industry.

Graduates are well-positioned for employment in various sectors, including oil and gas, construction, manufacturing, materials handling and even specialized areas such as ski lift maintenance.

Whether you aspire to become a seasoned millwright or move into supervisory roles, our program is the stepping stone to a career path in industrial mechanics.

Traits, skills and aptitudes

Industrial mechanics 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) Industrial Mechanic (Millwright) 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 Industrial Mechanic (Millwright) apprenticeship program beginning in period two.

Credentials

Upon successful completion of the program, you'll receive a SAIT Pre-Employment Industrial Mechanic (Millwright) certificate.

Admission requirements

Applicants educated in Canada

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

- Math 20-1, Math 20-2, or Math 20-3, and
- English Language Arts 20-1 or English Language Arts 20-2, and
- 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	0.5	$7,488	$172.50**	$7,660.50
			Total cost:	**$7,660.50**

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 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.