Chemical Engineering Technology

MACPHAIL SCHOOL OF ENERGY

Overview

We bring all the elements together for a dynamic career with our Chemical Engineering Technology program.

Designed for those who seek a blend of theoretical knowledge and practical skills, this diploma program offers a hands-on learning experience. Our labs are crafted to mirror common equipment and process units, giving you a real-world feel of the industry.

This program offers:

- in-depth theoretical and practical knowledge, delving into the intricacies of unit operations, process simulation and equipment design
- training in the essentials of operating, troubleshooting, maintaining, and designing safe and efficient processing units and plants
- industry-trained instructors with a wealth of knowledge and experience who will guide you through design calculations, process simulation and control, along with crucial aspects of industry safety and environmental engineering
- advanced engineering software training, giving you the tools and skills to excel in the modern chemical engineering landscape
- a capstone project where you'll apply and enhance your skills in a practical setting in sectors such as chemical process engineering, water treatment and others.

Benefit from our strong ties with industry leaders and professionals, with networking opportunities and insights into current industry practices.

This program encourages ongoing learning, ensuring you remain current with the latest trends and technologies in chemical engineering-related fields such as renewable energy development, environmental engineering, biotechnology, pharmaceutical industries, oil and gas processing and beyond.

The versatility of the skills you acquire opens doors to numerous industries. Start your career as a chemical technologist, environmental technician, process engineering technologist or process designer. Opportunities also exist in engineering design, process simulation, technical sales, field operations and environmental sectors.

Alternatively, leverage your education for further studies with transfer options to universities or colleges.

Whether your goal is to jump-start your career or to pave the way for further academic pursuits, our Chemical Engineering Technology program is a great launchpad for your ambitions.

Traits, skills and aptitudes

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

You need:

- attention to detail
- persistence
- accuracy
- problem-solving skills
- the ability to speak and listen well
- leadership and people skills
- the ability to work on a team
- the ability to supervise others.

You should enjoy working with people, analyzing data, math, taking a methodical approach to your work and being innovative.

Practicum, Co-op and Work Integrated Learning

In your second year, you'll participate in a capstone project where you'll apply what you've learned in your classes to resolve an issue

and present your work to an industry partner.

Accreditations, designations and certifications

This program is accredited by Technology Accreditation Canada (TAC).

Graduates are eligible to register in the Alberta Society of Engineering Technologists. Periodical registration agreements exist with U.S. and British societies.

Credentials

After successfully completing this program, you'll receive a SAIT Chemical Engineering Technology diploma.

Admission requirements

Applicants educated in Canada

All applicants must demonstrate English language proficiency and meet all of the following requirements or equivalents:

- at least 60% in Math 30-1 or 75% in Math 30-2, and
- at least 60% in English Language Arts 30-1 or 75% in English Language Arts 30-2, and
- at least 60% in Chemistry 30, and
- at least 60% in Physics 20.

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 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	$6,268.50	$1,764.50	$8,033
2	2	$5,970	$1,764.50	$7,734.50
			Total cost:	**$15,767.50**

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	$21,105	$1,764.50	$22,869.50
2	2	$20,100	$1,764.50	$21,864.50
			Total cost:	**$44,734**

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 cost approximately $1,800 in the first year and $900 in the second 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 personal protective equipment (PPE)

The industry-approved PPE you'll need will be discussed during your first few days of classes.

PPE is required in various labs. You'll need a lab coat and CSA-approved safety glasses (with UVEX and side shields) by the first day of class to enter the chemistry labs.