Electronics Engineering Technology

MACPHAIL SCHOOL OF ENERGY

Overview

Embark on a transformative journey towards becoming an electronics engineering technologist.

This program will equip you with the skills to design, analyze and troubleshoot electronic circuits and systems. Specialize in cutting-edge fields, including GPS-based systems, surveillance and wireless communication.

In this program, you will learn:

- about real-world electronic issues and innovative solutions
- to research and design
- prototyping and implementation, bringing your electronic designs to life and seeing them in action
- to master the complexities of digital and analog applications
- to command the operations of various electronic control systems
- circuit design and simulation by utilizing computer-aided tools
- to understand microprocessor systems and apply the "brains" of electronic devices, the integrated circuits that execute the functions of a central processing unit
- radiofrequency (RF) communication technologies
- computer-enhanced testing and measurement using advanced software
- to collaborate with electrical engineers on conceptual and practical circuit design tasks
- to employ a variety of analysis methods to evaluate circuit performance
- fabrication and troubleshooting with hands-on experience working alongside skilled technicians in creating and maintaining electronic systems.

Benefit from the expertise of seasoned instructors. Embrace computers and information technology with presentations and simulations that enhance understanding.

Apply theoretical knowledge in practical lab environments for a comprehensive learning experience.

After completing the program, you will be armed with the skills to make you an asset in this dynamic sector.

You could start your career as an electronic engineering technologist or technician, contributing to research and development in the industry. The program paves the way for you to continue your education and earn an electrical engineering degree with transfer options across various Canadian universities.

Traits, skills and aptitudes

Electronics engineering technologists tend to be objective, innovative and methodical.

You need:

- strong communication skills
- and aptitude for math and science
- patience and persistence
- time-management and critical thinking skills
- technical problem-solving skills
- fine motor skills and hand-eye coordination
- the ability to work on a team
- the ability to meet deadlines under pressure
- an interest in continued learning.

In some positions, good colour vision is also important.

You should enjoy working with tools, equipment, instruments and machinery, finding creative solutions to problems, taking a step-by-

step approach to your work and overseeing others.

Practicum, Co-op and Work Integrated Learning

In your final semester, you'll participate in a capstone project where you'll explore a problem and perform applied research to develop a proposed solution.

Accreditations, designations and certifications

This program is accredited by Technology Accreditation Canada (TAC) at the Engineering Technologist level.

After two years of suitable industry experience, graduates are eligible for membership in The Association of Science and Engineering Technology Professionals of Alberta (ASET) as a Certified Engineering Technologist (CET).

Credentials

After successfully completing this program, you'll receive a SAIT Electronics 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 English Language Arts 30-2, 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	$7,230	$1,764.50	$8,994.50
2	2	$7,230	$1,764.50	$8,994.50
			Total cost:	**$17,989**

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	$22,680	$1,764.50	$24,444.50
2	2	$22,680	$1,764.50	$24,444.50
			Total cost:	**$48,889**

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 $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 personal protective equipment (PPE)

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

Required tools and equipment

A small electronics parts kit will be required in your fourth semester. These will be available for purchase through the SAIT Bookstore.