Avionics Technology

SCHOOL OF TRANSPORTATION

Overview

Embark on a transformative journey with our Avionics Technology program, designed to equip you with the essential expertise to become a licensed aircraft maintenance engineer (AME) "E".

This program lays the foundation for a career in avionics maintenance, focusing on modern aircraft's electrical and electronic parts.

In this program, you will learn:

- the fundamentals of aircraft electrical systems, ensuring a solid understanding of the basics
- the advanced electronics used in aviation, from theory to application
- the essentials of aircraft communication systems, vital for pilot and ground interactions
- the essentials of aircraft navigation systems, crucial for safe flying
- the details of data systems within aircraft, a growing field as avionics become increasingly sophisticated
- repair and maintenance techniques specific to avionics, preparing you for hands-on work in the field.

Once you graduate, you'll be prepared to begin work in the aviation industry and work towards becoming an "E" licensed AME. As an avionics technician, you will maintain and repair aircraft avionics systems. The program is aligned with the current demands of the aviation industry, ensuring your skills are up to date.

Situated at the Art Smith Aero Centre for Training and Technology at the Calgary International Airport, the program offers a unique learning environment. Benefit from modern computer labs equipped for web-based learning. All required equipment and resources are provided.

The program spans four semesters, with a break between the second and third.

There are opportunities to connect with industry professionals through workshops and seminars.

Upon completion, you will be ready to tackle the challenges of avionics and poised for a career managing the critical electronic systems that keep aircraft safely in the sky.

Traits, skills and aptitudes

Avionics technicians tend to be objective, methodical and innovative.

You need:

- good writing and speaking skills
- the ability to work alone and with others
- an interest in taking more training as needed
- math skills
- patience for solving problems
- good colour vision
- manual dexterity.

You should enjoy analyzing complex data and using tools for precise tasks. You should be able to follow clear rules and enjoy being organized.

Practicum, Co-op and Work Integrated Learning

You'll have the opportunity to engage with potential employers in a variety of settings, providing experience in the aviation industry. You'll work with experienced technicians to gain a better understanding of what your career post-graduation will look like.

During this experience, you'll need to meet the safety requirements of the company you will be job shadowing and may need to purchase additional personal protective equipment (PPE.)

Accreditations, designations and certifications

If you attend 95% or more of your classes and labs and achieve minimum marks of 70% in each course, you'll receive a Transport Canada credit for 18 months' work experience towards the "E" category AME license.

This program is accredited by Transport Canada, subject to periodic audits.

Credentials

Upon successful completion of this program, you will be awarded a SAIT Avionics Technology diploma.

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 30-1 or Math 30-2. Either course meets the admission requirement; Math 30-2 is preferred
- at least 50% in English Language Arts 30-1 or 30-2.

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 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	$8,217	$1,764.50	$9,981.50
2	2	$7,470	$1,764.50	$9,234.50
			Total cost:	**$19,216**

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
Year	Number of semesters	Tuition fees	Additional fees	Total per year
1	2	$23,331	$1,764.50	$25,095.50
2	2	$21,210	$1,764.50	$22,974.50
			Total cost:	**$48,070**

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 for the first year and $100 for the second.

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)

Coveralls (supplied by SAIT) and safety glasses are required. Safety glasses can be purchased using a debit or credit card.

Wait to purchase your equipment. The industry-approved PPE you'll need will be discussed at orientation.

Required equipment/tools

A list of required tools will be provided at orientation. You'll have to purchase these during your first few weeks of classes.

The required tools and personal safety equipment will cost approximately $1,200. However, prices vary depending on the quality and brand of tools chosen.