Remotely Piloted Aircraft Systems Diploma

SCHOOL OF TRANSPORTATION

Overview

Soar to new heights with our Remotely Piloted Aircraft Systems (RPAS) diploma and start an exciting career as a professional RPAS pilot.

Learn how to fly a wide variety of RPAS (unmanned systems) in a multitude of industry-simulated applications, process collected data, and repair and maintain them to ensure airworthiness. This program will prepare you to meet Transport Canada's training and regulation requirements to professionally pilot RPAS in all environments, including Beyond Visual Line of Sight (BVLOS) operations.

As a student, you will:

- learn how to maintain RPAS platforms
- learn the regulatory and planning aspects of RPAS operation
- learn to conduct inspections and map geomatics data for environmental, agricultural and industrial applications
- have the opportunity to produce a usable product for clients or employers
- learn how to contribute to your company's business plan and design
- coordinate RPAS flight operations with various RPAS pilots and projects
- lead RPAS teams in high-risk, complex operations
- interpret and adhere to policies for RPAS operation at the company or federal level
- ensure company compliance and site audits.

You'll also work towards your Advanced Pilot Certificate and Restricted Operator Certificate-Aeronautical(ROC-A) certifications.

There is no better time to get into the RPAS field as this dynamic industry continues to grow rapidly across many sectors, including agriculture, forestry, energy and environment, construction, cinematography, and emergency services.

If you are interested in advanced technology and drones and you want to become an expert in the field and understand the business side of RPAS, this program is for you.

Traits, skills and aptitudes

Professional Remotely Piloted Aircraft Systems pilots need:

- a strong interest in aviation and advanced technologies
- the ability to think in 3D
- strong concentration skills
- strong communication skills
- the ability to remain calm under pressure
- IT and math skills
- the ability to make quick decisions in emergencies, give accurate instructions and accept considerable responsibility.

Following Transport Canada's requirements, pilots must:

- not suffer from any condition which would render them unfit to perform their duties
- have a visual acuity of 20/20 (the use of corrective lenses to achieve this is acceptable)
- have sufficient English language ability to be understood by local air traffic control when using VHF radio
- provide evidence of good health
- be a Canadian citizen or a permanent resident.

Accreditations, designations and certifications

Graduates of this program will have the following certifications:

- Transport Canada Pilot Certificate - Advanced Operations

- Restricted Operator Certificate-Aeronautical (ROC-A)

This program is also positioned to meet anticipated certification standards of Transport Canada Level 1 Complex Operations (RPAS Pilot Certificate) once they are finalized and approved.

Credentials

After successfully completing this program, you'll receive a SAIT Remotely Piloted Aircraft Systems diploma.

Admission requirements

Domestic requirements

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

- a minimum of 50% in English Language Arts 30-1 or English Language Arts 30-2, and
- a minimum of 50% in Math 30-1 or Math 30-2, and
- a minimum of 50% in one Grade 12 Science course.

SAIT accepts high school course equivalents for admission for applicants educated outside Alberta.

International requirements

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 in one semester 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	$10,710	$1,764.50	$12,474.50
2	2	$10,710	$1,764.50	$12,474.50
			Total cost:	**$24,949**

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	$19,950	$1,764.50	$21,714.50
2	2	$19,950	$1,764.50	$21,714.50
			Total cost:	**$43,429**

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

Books and Supplies

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.

Additional software required for the program will be provided, including:

- Pix4Dmapper
- ArcGIS
- Ardupilot Mission Planner

Please ensure your device is capable of running these programs.

Books are approximately $150 per year. 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 equipment/tools

You will need to purchase a drone build kit for approximately $1,200 in your first year.

Required personal protective equipment (PPE)

You'll be required to use personal protective equipment (PPE) when working in the shop and performing flight duties. Some of this equipment can be purchased from SAIT and others will need to be sourced elsewhere. The cost of PPE is approximately $220.