AVIATION OPERATIONS (AVO)

About the Program

In this two-year diploma program, you will receive a comprehensive education in aviation that includes the study of Canadian regulations, as well as the technical and practical skills required to work in a variety of airside operations roles. The Aviation Operation diploma program will provide you with the information you need to complete the Transport Canada Dispatcher licence exams.

Credential Awarded

Ontario College Diploma

Duration

4 Semesters (2 Years)

Starts

September

Program and Course Delivery

This program is offered in Seneca's flexible delivery format. Using interactive learning spaces, professors teach in person to students in a physical classroom or lab and stream to students online at the same time. In courses delivered in the flexible format, students have a choice of coming to campus for an in-person experience or learning online.

Skills

Throughout this program you will develop the following skills:

- Aviation standards
- History and regulations
- Aviation management
- Airside operations
- Flight planning and dispatch
- Meteorology
- Emergency planning

Work Experience
Optional Co-op

Students meeting all academic requirements may have the opportunity to complete an optional co-op work term(s) in a formal work environment. In most cases the work term(s) is a full-time paid position completed between two academic semesters. In programs with limited co-op opportunities, additional academic requirements and a passing grade on a communication assessment may be required for eligibility. Eligibility for participation does not guarantee a work position will be secured. Additional fees are required for those participating in the optional co-op stream regardless of success in securing a work position.

Review eligibility requirements for work-integrated learning (https://www.senecapolytechnic.ca/employers/seneca-works/work-integrated-learning/eligibility.html)

Work-Integrated Learning Model

Year	September	January	May
1	Semester 1	Semester 2	Semester 3
2	Work Term	Semester 4	

Your Career

Graduates of the program can explore the following career options:

- Flight planner
- Dispatcher
- Ground operator
- Quality assurance auditor

Affiliations/Associations

The Seneca Polytechnic Aviation Operations diploma program will prepare students to complete their Industry Canada radio licence and meet the requirements for writing the Transport Canada Dispatcher licence exams.

Note: Students must pass all Transport Canada exams, which have higher pass grades.

Program of Study

Course Code	Course Name	Weekly Hours
Semester 1		
ACA121	Aviation Computer Applications	3
AER121	Aeronautics I	3
AVM121	Aviation Management I	3
AVS121	Aviation Studies I - History and Standards	3
COM101 or COM111	Communicating Across Contexts / Communicating Across Contexts (Enriched)	3
MTH120 or MTH121	AVO/ASE Math Bridge / Mathematics	4-6
Semester 2		
FDP221	Flight Dispatch I	3
FLP221	Flight Planning I	3
MET321	Meteorology	3
MTH221	Mathematics	3
SMS221	Safety Management System I - Documentation and Implementation	3
plus: General Education Course (1)		3
Semester 3		
ASO321	Airside Operations	3
AVM321	Aviation Management II	3
FPD321	Flight Planning and Dispatch	3
HAS321	Health and Safety	3
TEC400	Technical Communications	3
WTP100	Work Term Preparation [*]	1
plus: General Education Course (1)		3
Work-Integrated Learning Term		
AVO331	Aviation Operations, Co-op [*]	30
Semester 4		
ALO421	Airline Operations	3

EPP421	Emergency Planning and Preparedness	3
SEC421	Aviation Security	3
SMS421	Safety Mgmt. System II - Quality Control and Assurance	3
TPL421	Transport Logistics - International Customs & Freight	3
plus: General Education Course (1)		3

* Work-Integrated Learning option only

Program Learning Outcomes

This Seneca program has been validated by the Credential Validation Service as an Ontario College Credential as required by the Ministry of Colleges and Universities.

As a graduate, you will be prepared to reliably demonstrate the ability to:

- Describe and work within Canadian and international regulations and regulatory bodies related to aviation.
- Assist in operating, maintaining and administering airports in an effective and efficient manner.
- Apply principles of management in administering air terminals and air carrier fleets, including cargo.
- Verify all servicing and maintenance requirements of aircraft for safe and efficient operation of air carrier fleets.
- Apply accounting and finance principles to prepare and follow budgets, do cost analysis, and effectively work with leases and contracts.
- Organize the safe and effective handling and transportation of hazardous materials.
- Employ basic skills in decision making, problem solving and human relations consistent with a junior management position.
- Communicate on a radio in accordance with the appropriate Industry Canada guidelines, including the successful obtainment of a Restricted Radiotelephone Operators Certificate.
- Implement accident and emergency response procedures for an aviation operation.
- Define the security systems available to respond to the security threats faced by the Canadian civil aviation industry.
- Perform cardio-pulmonary resuscitation and emergency first aid according to recognized industry standards of expertise.

- Describe the design and control of Canadian airspace, the principles of meteorology and the navigational systems and aids used in aviation.

Admission Requirements

- Ontario Secondary School Diploma (OSSD), or equivalent, or a mature applicant (https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/mature-applicants.html)
- English: Grade 12 C or U, or equivalent course
- Mathematics: Grade 12 C or U, or equivalent course

Canadian citizens and permanent residents may satisfy the English and/or mathematics requirements for this program through successful Seneca pre-admission testing. (https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/mature-applicants.html)

Recommended upgrading for applicants who do not meet academic subject requirements (https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/upgrading-options.html).

International Student Information

International admissions requirements vary by program and in addition to English requirements (https://www.senecapolytechnic.ca/international/apply/how-to-apply/admission-requirements/english-requirements.html), programs may require credits in mathematics, biology, and chemistry at a level equivalent to Ontario's curriculum, or a postsecondary degree or diploma, equivalent to an Ontario university or college. Program-specific pre-requisite courses and credentials are listed with the admission requirements on each program page. To review the academic requirements please visit: Academic Requirements - Seneca, Toronto, Canada (senecapolytechnic.ca) (https://www.senecapolytechnic.ca/international/apply/how-to-apply/admission-requirements/academic-requirements.html).

Pathways

As a leader in academic pathways, we offer a range of options that will allow you to take your credential further in another Seneca program or a program at a partner institution.

To learn more about your eligibility, visit the Academic Pathways (https://www.senecapolytechnic.ca/pathways.html) web page.

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