OCBT FLIGHT CENTRE

FUTURE PILOT & AVIATION CAREERS

CERTIFICATE

FULL-TIME | ACADEMIC + CO-OP



960	480	480
TOTAL HOURS	ACADEMIC HOURS	CO-OP HOURS

COURSE OVERVIEW

The Future Pilot & Aviation Careers Certificate introduces students to the aviation industry, pilot training pathways, aircraft operations, aviation safety, and career opportunities.

The program combines 480 hours of academic learning with 480 hours of supervised co-operative education to build foundational aviation knowledge and professional workplace skills.

PROGRAM STRUCTURE

6 academic courses x 80 hours + 1 supervised co-op placement

LEARNING OUTCOMES & PROGRAM STRUCTURE

PROGRAM AT A GLANCE

Program type	Full-Time Certificate Program
Total duration	960 Hours
Academic training	480 Hours (6 courses)
Co-operative education	480 Hours (supervised placement)

LEARNING OUTCOMES

Upon successful completion of the program, students should be able to:

1. Describe the aviation industry and common pilot and aviation career pathways.
2. Explain foundational principles of flight, aerodynamics and aircraft performance.
3. Identify major aircraft systems, instruments and aviation technologies.
4. Interpret introductory weather and navigation information.
5. Recognize aviation safety responsibilities, regulations and human factors.
6. Demonstrate communication, teamwork and professional conduct in aviation workplaces.
7. Apply foundational skills through supervised aviation co-operative education.

PROGRAM HOURS DISTRIBUTION



ACADEMIC 480 HOURS / 50% **CO-OP 480 HOURS / 50%**

CURRICULUM & COURSE DETAILS

PROPOSED COURSE CURRICULUM

Six academic courses (80 hours each) plus supervised aviation co-op.

CODE	COURSE NAME	HOURS
FPAC101	Introduction to Aviation and Pilot Careers	**80**
FPAC102	Fundamentals of Flight and Aerodynamics	**80**
FPAC103	Aircraft Systems and Aviation Technology	**80**
FPAC104	Aviation Meteorology and Navigation	**80**
FPAC105	Aviation Safety, Regulations and Human Factors	**80**
FPAC106	Aviation Operations and Career Development	**80**
	TOTAL ACADEMIC HOURS	**480**
FPAC107	Supervised Aviation Co-operative Education	**480**
	TOTAL PROGRAM HOURS	**960**

CO-OPERATIVE EDUCATION

The 480-hour supervised placement provides practical workplace exposure in an aviation-related environment, such as a flight training centre, airport, aviation operations office or another approved aviation organization.

All placement activities must be appropriate to the student's training, supervision, and applicable aviation regulations.

DETAILED COURSE DESCRIPTIONS | PART 1

FPAC101 Introduction to Aviation and Pilot Careers

80 INSTRUCTIONAL HOURS

Introduces students to the aviation industry, including its history, structure, career pathways, and professional expectations.

KEY TOPICS

Aviation history; commercial and general aviation; pilot licensing pathways; flight schools; airport operations; aviation careers; professional communication.

FPAC102 Fundamentals of Flight and Aerodynamics

80 INSTRUCTIONAL HOURS

Provides foundational knowledge of how aircraft fly and the scientific principles involved in flight.

KEY TOPICS

The four forces of flight; lift and drag; aircraft stability; flight controls; basic flight manoeuvres; aircraft performance; weight and balance; introductory flight planning.

FPAC103 Aircraft Systems and Aviation Technology

80 INSTRUCTIONAL HOURS

Familiarizes students with common aircraft components, mechanical systems, instruments, and aviation technologies.

KEY TOPICS

Aircraft structures; piston engines; propellers; fuel systems; electrical systems; landing gear; flight instruments; avionics; introductory aircraft maintenance awareness.

DETAILED COURSE DESCRIPTIONS | PART 2

FPAC104 Aviation Meteorology and Navigation

80 INSTRUCTIONAL HOURS

Develops an understanding of weather conditions affecting aviation and the fundamentals of aircraft navigation.

KEY TOPICS

Atmospheric conditions; clouds; visibility; wind; aviation weather reports; aeronautical charts; headings; distance calculations; GPS navigation; introductory cross-country planning.

FPAC105 Aviation Safety, Regulations and Human Factors

80 INSTRUCTIONAL HOURS

Introduces aviation safety practices, regulatory responsibilities, and human performance considerations.

KEY TOPICS

Transport Canada aviation regulations; airspace awareness; safety management principles; risk assessment; aviation security; emergency procedures; fatigue management; aeronautical decision-making.

FPAC106 Aviation Operations and Career Development

80 INSTRUCTIONAL HOURS

Prepares students for entry-level aviation workplace environments and further aviation education.

KEY TOPICS

Flight school administration; aircraft scheduling; dispatch support; customer service; aviation documentation; teamwork; workplace ethics; résumé development; interview preparation; career planning.

CO-OP PLACEMENT & IMPORTANT INFORMATION

FPAC107 | SUPERVISED AVIATION CO-OPERATIVE EDUCATION

480 HOURS | SUPERVISED WORKPLACE EXPERIENCE

Provides supervised practical workplace experience in an aviation-related environment, such as a flight training centre, airport, aviation operations office, or approved aviation organization.

ILLUSTRATIVE PLACEMENT ACTIVITIES

- Observe aviation and flight training operations under appropriate supervision.
- Assist with approved administrative tasks and workplace documentation.
- Support dispatch, scheduling and coordination activities.
- Help organize operational records and safety documentation.
- Practice teamwork, professional communication and workplace ethics.
- Reflect on aviation career interests and professional skill development.

PROGRAM NOTES

This curriculum is proposed for institutional review. It is intended as an aviation career-exploration certificate and does not itself award a pilot licence or replace flight training required by Transport Canada.

If offered for Ontario secondary-school credit, the course hours, credits, co-operative education structure and delivery must independently meet applicable Ministry of Education requirements. Eighty instructional hours does not automatically establish secondary-school credit equivalency.

Program tuition, admission requirements, calendar dates and institutional approval status should be confirmed before public distribution.