BEYOND LIMITS

Just plane awesome.

From the first hot air balloons to modern fighter jets, we’ve come a long way in the field of flight and aerospace. In just over 200 years, we’ve moved from two-manned flight to aircrafts that can carry more than 850 passengers. It’s an incredible time to be a part of this industry.

Aviation has become one of the most exciting and sought-after professions of our times. The notion of soaring through the skies and defying the laws of gravity has always captivated humans – especially those with an affinity for adventure. Every year, the mandate of the airline industry expands; from environmental innovation to technological advances, there’s no shortage of challenges requiring qualified pilots and professionals.

Having a degree and the professional training to become a commercial pilot will give you the advantage you need – along with the skills and knowledge to fly with confidence.

INDUSTRY INNOVATORS

The global economic contribution of the aviation industry is immense. It’s estimated that aviation supports more than 65 million jobs worldwide, in such areas as tourism, cargo and freight, research and development, manufacturing, and IT. The aviation industry is cyclical, and picks up new technological advances and innovations each time around.

In 2019, it was projected that Canada alone would need 7,000 to 10,000 new pilots by 2025 – as a large number of current pilots are scheduled for mandatory retirement. As aircraft operators want the most skilled and capable professionals, the need for graduates with a high-quality academic background is greater than ever before.

PARTNERSHIPS FOR SUCCESS

We’re leaders in aviation education, and the industry has taken notice. We’ve established multiple partnerships with airlines to create expedited pathways from graduation to airline pilot positions.
SCIENCE AND AVIATION

Things are looking up.

The science of flight is fascinating – and even more so when you can take courses that teach the foundations of physics, chemistry, and earth sciences. Learn from award-winning professors in the Faculty of Science while you pursue both your BSc degree and your commercial pilot licence. Test your skills in labs that reinforce classroom learning and join one of the most active student societies on campus – SciSoc. Enjoy a career in the aviation industry while understanding the underlying principles of drag, lift, speed, and weight.

Sample classes:
- Introductory Earth Sciences
- Communication in the Sciences
- Introductory Environmental Sciences
- Physics
- Mathematics
- Introduction to Aviation
- Designing Effective Maps
- Chemistry

GEOGRAPHY AND AVIATION

Chart your course and take flight.

Experience the world as a pilot and geographer, from the soil below to 30,000 feet in the air. You’ll explore landforms, weather patterns, and use such cutting edge technology as drones and geographic information systems (GIS) from one of Canada’s top-ranked geography departments – all while completing the flight training needed to acquire your commercial pilot licence. You’ll graduate with multi-engine and instrument ratings, and the skills needed to advocate for responsible industry practises through your knowledge of sustainable tourism and the environment.

Sample classes:
- Earth from Space Using Remote Sensing
- Global Environmental Systems: Processes and Change
- Designing Effective Maps
- Hydroclimatology
- Geodesy and Surveying
- Geography of the Global Economy

Whether you choose Science and Aviation or Geography and Aviation, you’ll receive the same innovative aviation industry and flight training.

Sample aviation classes:
- Introduction to Aviation
- Human Factors in Aviation
- Aviation Safety
- RPAS (UAV) Requirements for Geomatics

Waterloo Wellington Flight Centre (WWFC)

WWFC is your school for flight training. Located 20 minutes from the University of Waterloo, at the Region of Waterloo International Airport, it’s one of Canada’s top flight schools. When you start your training, you’ll fly in single pilot, non-high-performance aeroplanes (i.e., Cessna, Diamond, or Piper Seminoles). When you finish your training, you’ll be eligible to fly commercial aircraft.

CAREER OPTIONS

(Some may require further training)
- Commercial pilot
- Flight instructor
- Charter/corporate pilot
- Military pilot
- Flight dispatcher
Take your career sky high.

Gain the skills and expertise you need to excel in the growing aviation or aerospace industries. Earn a three- or four-year Bachelor of Environmental Studies from one of the world’s best geography departments, where you’ll learn how to use tools such as geographic information systems and remote sensing, interpret weather patterns, read multi-layer maps, understand the impact of tourism, and advocate for sustainable practices within the aviation industry.

Take advantage of the program’s flexibility and enrol in independent flight training. Or apply into the co-op program to graduate with a prestigious Waterloo degree and up to 20 months of paid work experience. The choice is yours.

While no previous flying experience is required, transfer credits may be awarded to students with a Canadian private pilot licence.


POSSIBLE CAREER FIELDS
- Air traffic services
- Unmanned aerial vehicles (UAV) industry
- Aerial and LiDAR surveying and remote sensing
- Rotary and fixed wing pilot (requires additional training)

Choose from 70+ GEOGRAPHY CLASSES

STILL UNSURE? FIND YOUR CAREER FIT.

Need some support determining your professional goals and career path? Check out “Aviation Fundamentals” – an online self-study course. Developed in collaboration with the University of Waterloo and the United Nations International Civil Aviation Organization (ICAO), this is your introductory guide to the exciting fields and opportunities in the aviation industry.

TUITION AND FEES

FLIGHT TRAINING NEXT STEPS
1. Attend an information session with Waterloo Wellington Flight Centre.
2. Submit a Transport Canada Medical Category 1 certification by an approved civil aviation medical examiner to WWFC no later than August of your entry year. Students should confirm medical eligibility prior to accepting an offer of admission.
3. Review the FAQ and financing sections of our website, so you’re well-informed of the financial and time commitments of our program.
4. Accept your offer by June 1, 2021.

COMMUNITY CONNECTIONS
Meet students that share your passion. Join the UW Aviation Student Society for industry networking, mentorship opportunities, and social events.
We acknowledge that the University of Waterloo is located on the traditional territory of the Neutral, Anishnaabeg, and Haudenosaunee people. The University is situated on the Haldimand Tract, the land promised to the Six Nations that includes 10 kilometres on each side of the Grand River.