

DRN101 - Drone Ground School

Faculty of Continuing Education, Fall - 2022

Subject Title

Drone Ground School

Subject Description

Students examine the fundamental knowledge needed to complete Transport Canada's Written Exam for a pilot of a small Remote Piloted Aircraft Systems (RPAS), or commonly known as drones. Students use a practical approach by reviewing real-life flight scenarios such as Filmmaking, Search and Rescue as well as Inspections and Mapping. Students learn at their own pace and build fundamental knowledge through the multimedia learning material. Students also have the option to join Live Webinars to have your questions answered live, learn from other students, and enjoy modern learning from virtually anywhere.

Learning Outcomes

Upon successful completion of this subject the student will be able to:

- 1. Describe the Remotely Piloted Aircraft Systems (RPAS) market, including the language used and characteristics of commercial applications.
- 2. Examine Transport Canada's mandatory RPAS topics to prepare for certification.
- 3. Complete a flight plan for RPAS operations that includes all flight operation variables, including communication, weather, human elements, and legal aspects.
- 4. Describe the social aspects of RPAS operations related to air law to support future fight compliance.
- 5. Develop a plan for applying drones to future career development.

Academic Integrity

Seneca upholds a learning community that values academic integrity, honesty, fairness, trust, respect, responsibility and courage. These values enhance Seneca's commitment to deliver high-quality education and teaching excellence, while supporting a positive learning environment. Ensure that you are aware of Seneca's Academic Integrity Policy which can be found at: http://www.senecacollege.ca/about/policies/academic-integrity-policy.html Review section 2 of the policy for details regarding approaches to supporting integrity. Section 2.3 and Appendix B of the policy describe various sanctions that can be applied, if there is suspected academic misconduct (e.g., contract cheating, cheating, falsification, impersonation or plagiarism).

Please visit the Academic Integrity website http://open2.senecac.on.ca/sites/academic-integrity/for-students to understand and learn more about how to prepare and submit work so that it supports academic integrity, and to avoid academic misconduct.

Discrimination/Harassment

All students and employees have the right to study and work in an environment that is free from discrimination and/or harassment. Language or activities that defeat this objective violate the College Policy on Discrimination/Harassment and shall not be tolerated. Information and assistance are available from the Student Conduct Office at student.conduct@senecacollege.ca.

Accommodation for Students with Disabilities

The College will provide reasonable accommodation to students with disabilities in order to promote academic success. If you require accommodation, contact the Counselling and Accessibility Services Office at ext. 22900 to initiate the process for documenting, assessing and implementing your individual accommodation needs.

Camera Use and Recordings - Synchronous (Live) Classes

Synchronous (live) classes may be delivered in person, in a Flexible Learning space, or online through a Seneca web conferencing platform such as MS Teams or Zoom. Flexible Learning spaces are equipped with cameras, microphones, monitors and speakers that capture and stream instructor and student interactions, providing an inperson experience for students choosing to study online.

Students joining a live class online may be required to have a working camera in order to participate, or for certain activities (e.g. group work, assessments), and high-speed broadband access (e.g. Cable, DSL) is highly recommended. In the event students encounter circumstances that impact their ability to join the platform with their camera on, they should reach out to the professor to discuss. Live classes may be recorded and made available to students to support access to course content and promote student learning and success.

By attending live classes, students are consenting to the collection and use of their personal information for the purposes of administering the class and associated coursework. To learn more about Seneca's privacy practices, visit Privacy Notice.

Prerequisite(s)

N/A

Topic Outline

- 1. Intro to Drones
- 2. Theory of Flight
- 3. Airspace Management
- 4. Air Law
- 5. Airframes and Flight Instruments
- 6. Meteorology
- 7. Navigation
- 8. Human Element
- 9. Radio Communications
- 10. Flight Operations
- 11. TC Drone Pilot Written Exam Prep

Mode of Instruction

Online Asynchronous course including interactive lectures, live sessions and quizzes.

Prescribed Texts

None

Reference Material

None

Student Progression and Promotion Policy

To obtain a credit in this subject, a student must:

- Average of 50% or better for the two tests.
- 50% or better on the overall course.

http://www.senecacollege.ca/about/policies/student-progression-and-promotion-policy.html

Grading Policyhttp://www.senecacollege.ca/about/policies/grading-policy.html

90% to 100%
80% to 89%
75% to 79%
70% to 74%
65% to 69%
60% to 64%
55% to 59%
50% to 54%
0% to 49% (Not a Pass)
Excellent
Satisfactory
Unsatisfactory

For further information, see a copy of the Academic Policy, available online (http://www.senecacollege.ca/about/policies/academics-and-student-services.html) or at Seneca's Registrar's Offices. (https://www.senecacollege.ca/registrar.html)

Modes of Evaluation

30% - Online quizzes completion

30% - Webinar Attendance

40% - Transport Canada Advanced Written Test for sRPAS (Considered as Final Exam. Students must pass this exam and submit certificate in order to pass the course)

Approved by: Lisa Harfield

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Seneca College of Applied Arts and Technology