

**AIR 212 Multi-Engine Flight Lab**

*3 credits, 45 hours (45 instructional hours)*

This skills based course develops the student's skills in a multi-engine aircraft with emphasis on aerodynamics, speeds, aircraft systems, performance and emergency procedures. This course includes 12 hours dual flight training in a multi-engine aircraft to prepare the student to attain proficiency for the multi-engine class rating.

*Prerequisites:* Transport Canada Category 1 Medical; AIR 202 Commercial Flight Lab

**Instructors**

Vignesh Rajasekar,

McMurray Aviation

531 Snow Eagle Drive

Fort McMurray AB T9H 0H8

250-819-9199

[vrajasekar@mcmurrayaviation.com](mailto:vrajasekar@mcmurrayaviation.com)

[cbrace@mcmurrayaviation.com](mailto:cbrace@mcmurrayaviation.com)

[rmarno@mcmurrayaviation.com](mailto:rmarno@mcmurrayaviation.com)

**Office Hours**

Mon 9:00 – 17:00

Tue 9:00 – 17:00

Wed 9:00 – 17:00

Thu 9:00 – 17:00

Fri 9:00 – 17:00

## Hours of Instruction

TBD – Students Availability

## Required Resources

**Aeronautical Information Manual (TP 1471E)**, Transport Canada, Latest edition

**Jeppesen Multi-Engine Textbook**, Boeing Company, Latest Edition

**From the Ground Up**, “Sandy” A. F. MacDonald, 29<sup>th</sup> Edition

**VFR Navigation Chart (VNC) – Lake Athabasca(AIR 5023)**, Nav Canada 19<sup>th</sup> Edition

**VFR Navigation Chart (VNC) – Edmonton (AIR5015)**, Nav Canada, 32<sup>nd</sup> Edition

**Other Supplies**– Manual E6B or Electronic CX-3 Flight Computer, ICAO Ruler and Plotter

## Course Outcomes

Upon successful completion of the course, the student shall be able to:

- Satisfy Transport Canada’s Multi-Engine class rating requirements
- Acquire a minimum pass of B- (70%) on the Multi-Engine class rating flight test
- Distinguish between the operations and systems of single and multi-engine aircraft
- Demonstrate proficiency in flying a multi-engine aircraft with one engine inoperative
- Be eligible to apply for the Multi-Engine class rating

## **Evaluation**

Clearly outline what students must do in order to pass or complete the course.

Preparation for Flight 10%

Discussions 20%

Quizzes 20%

Flight Assessment 50%

Total 100%

## **NOTE: Proficiency and Examination**

- If student requires additional flight training to achieve the required proficiency, costs incurred are to be paid directly to McMurray Aviation, as this will be determined on a case-by-case basis.
- Multi-Engine class rating flight test must be completed at McMurray Aviation. In the event of an unsuccessful pass on all required flight test exercises, students will be required to pay McMurray Aviation directly for supplemental training and examination costs (costs determined on a case-by-case basis).

*A grade of B- is required for passing, progression and transfer.*

## **Grading System**

<b>Descriptor</b>	<b>Alpha Grade</b>	<b>4.0 Scale</b>	<b>Percent</b>
	A+	4.0	> 93.9
Excellent	A	4.0	87 – 93.9
	A-	3.7	80 – 86.9
	B+	3.3	77 – 79.9
Good	B	3.0	74 – 76.9
	B-	2.7	70 – 73.9
	C+	2.3	67 – 69.9
Satisfactory	C	2.0	64 – 66.9
	<b>Progression</b>	C-	60 – 63.9
Poor	D+	1.3	57 – 59.9
<b>Minimum Pass</b>	D	1.0	50 – 56.9
Failure	F	0.0	< 50

### **Proposed Schedule of Topics**

Since the flying portion will be happening on a one-one instructional basis, the flying exercises covered will depend on various factors such as weather, personal learning ability, understanding of the aircraft and personal scheduling. Refer to the AIR 212 Course Syllabus for the exercises and sequencing of flights.

#### **Please Note:**

Date and time allotted to each topic is subject to change.

## **Performance Requirements**

### **Student Responsibilities**

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College credit calendar.

More specific details are found in the Student Rights and Student Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

### **Student Attendance**

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and / or notes that may be due.

### **Academic Misconduct**

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own
- The use of unauthorized aids in assignments or examinations (cheating)
- Collusion or the unauthorized collaboration with others in preparing work
- The deliberate misrepresentation of qualifications
- The willful distortion of results or data
- Substitution in an examination by another person
- Handing in the same unchanged work as submitted for another assignment
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Student Code of

Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

In order to ensure your understanding of the concept of plagiarism, you must successfully complete the online tutorial found on [ilearn.keyano.ca](http://ilearn.keyano.ca). Then print the certificate, sign it, and show it to each of your instructors. Your course work will not be graded until you show this signed certificate.

## Specialized Supports

The Student Academic Support Services (SASS) department: Accessibility Services, Skill Centre, Wellness Services and Student Life Department work together to support student success at Keyano College.

**Accessibility Services (CC167)** supports student success through group and individualized instruction of learning, study and test taking strategies, and adaptive technologies. Students with documented disabilities, or who suspect a disability, can meet with the Learning Strategists to discuss accommodation of the learning barriers that they may be experiencing. Students who have accessed accommodations in the past are encouraged to visit our office at their earliest opportunity to discuss the availability of accommodations in their current courses. Individual appointments can be made by calling 780-791-8934.

**Skill Centre (CC119)** provides a learning space where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff. Students visiting the centre have access to one-to-one or group tutoring, facilitated study groups, and assistance in academic writing. The Skill Centre's Peer Tutor program provides paid employment opportunities for students who have demonstrated academic success and want to share what they have learned. Tutoring is available free to any students registered at Keyano College on a drop in basis, from 8:30 am to 5:00 pm Monday through Friday. Additional evening hours are subject to tutor availability and are posted in the Skill Centre.

**Wellness Services (CC260)** offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. The Mindfulness Room in CC260 is available as a quiet space for students to relax during regular office hours. Wellness Service welcomes students to participate in any of the group sessions offered throughout the academic year addressing such topics as Mindfulness and Test Anxiety. Individual appointments can be made by calling 780-791-8934.

**Student Life Department (CC210)** is a place for students to go when they don't know who else can answer their questions. The staff will help students navigate barriers to success and if they don't know the answer, they will find it out. Student success is directly affected by how connected a student feels to their college. The student life department is there to help students get connected.

**Please watch your Keyano email for workshop announcements from our Student Academic Support Services team.**