AVMT 239
Commercial Pilot Certification - Helicopter I
2 Credits

Community College of Baltimore County
Common Course Outline

Description

AVMT 239 – Commercial Pilot Certification - Helicopter I: provides the initial phase of flight and simulator training towards the completion of the Federal Aviation Administration (FAA) Commercial Pilot certificate, Helicopter category. Topics include advanced airport operations, precision hovering, commercial maneuvers, takeoffs and landings, cross-country flights, emergency procedures, and safety. A valid FAA Medical Certificate is required. This course has additional lab fees.

Pre-requisites: AVMT 235 or approval of the Aviation Program Director
Co-requisites: AVMT 236 or approval of the Aviation Program Director

Overall Course Objectives

Upon completion of this course, students will be able to:

1. conduct proper helicopter pre-flight inspections, start-up, and post-flight procedures ;
2. demonstrate effective and precise helicopter control during commercial pilot maneuvers;
3. employ correct aviation radio communications procedures;
4. demonstrate precise control during hover, hover-taxi, and air taxi flight;
5. perform normal and maximum-performance takeoffs;
6. conduct normal and steep approaches to landing;
7. execute straight-ahead and 180-degree autorotations to a power recovery;
8. develop comprehensive flight plans including risk assessment principles;
9. conduct multiple long-range cross-country flights using visual and instrument navigation; and
10. employ sound Aeronautical Decision-Making (ADM) and Single Pilot Resource Management.

Major Topics

   I.   FAA regulations pertaining to commercial flight operations
  II.   Weather theory and hazard evaluation for flight
 III.   Advanced helicopter systems
  IV.   Maximum-performance takeoffs and landings
   V.   Maximum-performance flight maneuvers
  VI.   Long range cross-country flights utilizing visual and instrument navigation
 VII.   Off-airport landing procedures
VIII.   Precision ground-reference maneuvers
  IX.   Emergency procedures
   X.   Human factors related to helicopter flight

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- 2 skills-based evaluations
- comprehensive final exam
- 2 writing assignments such as flight plans, special topic papers, current events reports, article or textbook summaries, research or case study analysis papers, and personal journals

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

Other Course Information

This course is required course in the Associate of Applied Science Professional Pilot Helicopter Aviation Technology degree program.

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