

AVMT 234

Instrument Pilot Rating - Helicopter I

2 Credits

Community College of Baltimore County
Common Course Outline

Description

AVMT 234 – Instrument Pilot Rating - Helicopter I: 17.5 dual instrument instruction flight hours (R-22) (20 hours total dual instruction flight time), 20 ground instruction hours, provides the initial phase of flight and simulator training towards the completion of the Federal Aviation Administration (FAA) Instrument Pilot Rating, Helicopter category. Topics include preflight preparation, air traffic control clearances and communications, flight by reference to instruments, flight navigation, safety, and post flight procedures. A valid FAA Medical Certificate is required.

Pre-requisites: AVMT 135 and approval of the Aviation Program Director

Co-requisites: AVMT 231 or approval of the Aviation Program Director

Overall Course Objectives

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

1. describe components of the National Airspace System affecting Instrument Flight Rules (IFR);
2. explain FAA regulations pertaining to flight under IFR;
3. discuss weather phenomenon and sources of weather information applicable to flight;
4. employ correct FAA aviation radio communications procedures in the IFR environment;
5. describe the operation of helicopter attitude reference and navigation systems;
6. demonstrate the fundamentals of instrument navigation;
7. contrast aerodynamics and flight techniques required for flight by reference to instruments;
8. execute standard helicopter flight maneuvers by reference to instruments;
9. perform unusual attitude recovery by reference to instruments; and
10. execute holding procedures by reference to instruments.

Major Topics

- I. FAA regulations related to flight by reference to instruments
- II. Attitude reference systems and instruments
- III. Clearance and communication procedures used in instrument flight
- IV. Weather factors affecting instrument flight
- V. Human physiological factors affecting instrument flight
- VI. Control and performance techniques in helicopter instrument flight
- VII. Primary and secondary instruments in IFR flight
- VIII. Unusual attitude recoveries by reference to instruments

The Common Course Outline (CCO) determines the essential nature of each course.

For more information, see your professor's syllabus.

- IX. Fundamentals of instrument navigation
- X. Instrument approaches and holding procedures

Course Requirements

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

- two skills-based evaluations
- comprehensive final exam
- two 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 a required course in the Associate of Applied Science Professional Pilot Helicopter Aviation Technology Degree Program and an elective course in the Associate of Applied Science Professional Pilot Unmanned Aircraft Systems Aviation Technology Degree program.

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