

# Common Course Outline

## AVMT 227

### Air Traffic Control Operations II

3 Semester Hours

## The Community College of Baltimore County

### Description

**AVMT 227 – 3 Credits – Air Traffic Control Operations II** provides an advanced study of air traffic control (ATC) tower operations, equipment, policies and procedures. Students learn proper teamwork, decision making and crew resource management (CRM) skills while applying their knowledge of terminal operations through ATC tower simulator exercises. These exercises present challenging scenarios such as Land and Hold Short procedures, holding and instrument approaches, aircraft emergencies and other dynamic examples.

**Prerequisites:** AVMT 221, AVMT 226, AVMT 241 and AVMT 243 with a grade of B or better in these courses.

### Overall Course Objectives

Upon completion of this course, using air traffic control tower simulation equipment, the student will be able to:

1. describe the relationship and integration of air traffic control facilities;
2. demonstrate the operation of air traffic control tower equipment;
3. explain key components of the Federal Aviation Regulations applicable to terminal control;
4. recognize the elements of Air Traffic Control Order 7110.65 associated with terminal control;
5. identify proper airport procedures and aircraft separation standards;
6. perform accurate aircraft recognition and explain the parameters of each aircraft type;
7. demonstrate teamwork in advanced terminal operations scenarios;
8. demonstrate proper handling of emergency procedures applicable to tower operations;
9. perform air traffic controller duties in high density airport scenarios; and
10. apply proper pilot-controller communications and phraseology in the terminal environment.

### Major Topics

- I. Relationship and function of air traffic control facilities
- II. Air traffic control equipment and operating parameters
- III. Publications and regulations applicable to air traffic control
- IV. Air Traffic Order 7110.65
- V. Terminal control procedures
- VI. Aircraft recognition
- VII. Advanced terminal control
- VIII. Teamwork and risk management
- IX. Air traffic controller duties
- X. Pilot-controller communications and phraseology

## **Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member but will include two (2) in-class examinations and four (4) practical air traffic tower simulator evaluations.

Writing: The individual faculty member will determine specific writing assignments such as special topic papers, current events reports, article or textbook summaries, research analysis papers, and personal journals.

## **Other Course Information**

This course is a core course in the Aviation Management Associate of Applied Science degree, Air Traffic Control option.

This course is taught in a classroom and simulator training environment.