

Prepared by the Department of Natural Sciences & Applied Technology

Date of Departmental Approval: March 18, 2018

Date Approved by Curriculum and Programs: April 4, 2018

Effective: Fall 2018

1. Course Number: AMT101

Course Title: Aviation Maintenance Technology (AMT): General Module 1

2. Description: AMT General Module 1 for the Federal Aviation Administration (FAA) is required by Title 14 of the Code of Federal Regulations (14 CFR) Advisory Circular Part 147-3B. AMT General Module 1 introduces students to the applications of human factors in aviation, mechanic privileges and limitations, maintenance publications, maintenance forms and records, basic physics for aviation, mathematics for aviation, aircraft drawings, and basic electricity.

3. Student Learning Outcomes:

Upon successful completion of this course, students are able to do the following.

- Identify human factors that affect performance in aviation maintenance and inspection.
- Exercise mechanic privileges within the limitations prescribed by FAA Part 65 Certification: Subpart D-Mechanics.
- Apply mathematics to problem solving in aviation maintenance. Solve for ratio, percentage, and proportion problems.
- Demonstrate applications of mechanics, aerodynamics, structures, and weight & balance to use proper techniques for aircraft operations.
- Apply electrical theory to problem solving and troubleshooting aircraft maintenance.
- Interpret and use basic aircraft drawings, blueprints, and graphs & charts.
- Apply Federal Aviation Regulations applicable to aircraft maintenance.

4. Credits: 6 credits

5. Satisfies General Education Requirement: No

6. Prerequisite: ENL108 (Critical Reading & Thinking) or satisfactory basic skills assessment score

7. Semesters Offered: Cohorts entering in September, January, May

8. Suggested General Guidelines for Evaluation: The course grade will be based on class work, laboratory, quizzes, tests, projects, and a final exam. Specific course grading procedures and make-up policies are detailed in a Cape Cod Community College Aviation Manual and an instructor course outline.

9. General Topical Outline:

- Human Factors in Aviation
- Mechanic Privileges and Limitations
- Maintenance Publications
- Maintenance Forms and Records
- Basic Physics for Aviation
- Mathematics for Aviation
- Aircraft Drawings
- Basic Electricity