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: AMT203**
   Course Title: Aviation Maintenance Technology (AMT): Powerplant Module 1

2. **Description:** AMT Powerplant 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 Powerplant Module 1 introduces students to the applications of reciprocating engines, turbine engines, induction and airflow systems, engine exhaust and reverser systems, diesel engines, engine instrument systems, unducted fans, and lubrication systems.

3. **Student Learning Outcomes:**
   Upon successful completion of this course, students are able to do the following.

   - Inspect, check, service, and repair reciprocating engines and engine installations. Install, troubleshoot, and remove reciprocating engines. Install, troubleshoot, and remove reciprocating engines.
   - Inspect, check, service, and repair turbine engines and turbine engine installations. Install, troubleshoot, and remove turbine engines.
   - Inspect, check, service, and repair carburetor air intake and induction manifolds.
   - Inspect, check, troubleshoot, service, and repair engine exhaust systems.
   - Inspect, check, service, troubleshoot, and repair electrical and mechanical engine temperature, pressure, and RPM indicating systems.
   - Inspect, check, service, troubleshoot, and repair engine lubrication systems.

4. **Credits:** 9 credits

5. **Satisfies General Education Requirement:** No

6. **Prerequisite:** Grade of C or higher in AMT101 (AMT: General Module I) and AMT102 (AMT: General Module II)

7. **Semesters Offered:** Varies

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:**

   - Reciprocating Engines
   - Turbine Engines
   - Induction and Airflow Systems
   - Engine Exhaust and Reverser Systems
   - Diesel Engines
   - Engine Instrument Systems
   - Unducted Fans
   - Lubrication Systems