

AIRFRAME & POWERPLANT, CERTIFICATE OF ACHIEVEMENT

Banner Code: 1_CF_AMAP

Control Number: 22392

Financial Aid Eligible

This program provides students with the technical skills and systems analysis necessary for entry-level positions as Airframe and Powerplant Certificated Mechanics in the aviation industry, such as airframe inspection, powerplant inspection, maintenance, and return-to-flight status of all types of U.S. Certificated aircraft.

Trained technicians are also successful in related fields of aircraft manufacturing, electronics, hydraulics, pneumatics, welding, sheet metal, quality control, civil and military defense. Additionally, students who have followed this program may earn an engineering degree at any one of several four-year institutions.

Program Outcomes

1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for Airframe & Powerplant certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

Review Graduation Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/certificates/#achievementtext>).

| Course | Title | Units |
|-------------------------|---|-------|
| Required Courses | | |
| AMT A150 | General Maintenance Records - FAA | 4 |
| AMT A151 | General Electricity - FAA | 3 |
| AMT A152 | General Airframe & Powerplant Fuel Systems - FAA | 2 |
| AMT A153 | General Materials, Processes & Welding - FAA | 3 |
| AMT A154 | General Weight & Balance, Math & Physics - FAA | 3 |
| AMT A155 | General Blueprint Reading & Drafting - FAA | 2 |
| AMT A160 | Airframe & Powerplant Electricity - FAA | 6 |
| AMT A161 | Airframe Sheet Metal & Composite Structural Repair - FAA | 5.5 |
| AMT A162 | Airframe Assembly & Rigging, Pneumatics & Environmental Control Systems - FAA | 3 |
| AMT A163 | Airframe Hydraulics and Landing Gear - FAA | 4.5 |
| AMT A170 | Powerplant Reciprocating Engines FAA | 6 |
| AMT A171 | Powerplant Fuel Metering, Exhaust & Induction Systems FAA | 4 |
| AMT A172 | Powerplant Propeller and Lubricating Systems FAA | 4 |
| AMT A173 | Powerplant Gas Turbine Engines - FAA | 6 |

| Course | Title | Units |
|--------------------|--|-----------|
| AMT A174 | Powerplant Ignition Systems - FAA | 2.5 |
| AMT A180 | Airframe and Powerplant Instrumentation FAA | 2.5 |
| AMT A181 | Airframe Communication and Navigation Systems - FAA | 2 |
| Total Units | | 63 |

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Airframe & Powerplant written examinations.

Program Sequence

These sequences at Orange Coast College are curriculum maps for students to finish all requirements for the certificate. There may be advisories, prerequisites, or time requirements that students need to consider before following these maps. **Students are advised to meet with an Orange Coast College Counselor for alternate sequencing.**

Some courses in this program may be offered once per academic year.

| Course | Title | Units |
|---------------------|---|-------------|
| Year 1 | | |
| Semester 1 | | |
| AMT A150 | General Maintenance Records - FAA | 4 |
| AMT A151 | General Electricity - FAA | 3 |
| AMT A152 | General Airframe & Powerplant Fuel Systems - FAA | 2 |
| AMT A153 | General Materials, Processes & Welding - FAA | 3 |
| AMT A154 | General Weight & Balance, Math & Physics - FAA | 3 |
| Units | | 15 |
| Semester 2 | | |
| AMT A160 | Airframe & Powerplant Electricity - FAA | 6 |
| AMT A161 | Airframe Sheet Metal & Composite Structural Repair - FAA | 5.5 |
| AMT A162 | Airframe Assembly & Rigging, Pneumatics & Environmental Control Systems - FAA | 3 |
| AMT A181 | Airframe Communication and Navigation Systems - FAA | 2 |
| Units | | 16.5 |
| Intersession | | |
| AMT A180 | Airframe and Powerplant Instrumentation FAA | 2.5 |
| AMT A155 | General Blueprint Reading & Drafting - FAA | 2 |
| Units | | 4.5 |
| Summer | | |
| AMT A163 | Airframe Hydraulics and Landing Gear - FAA | 4.5 |
| Units | | 4.5 |
| Year 2 | | |
| Semester 1 | | |
| AMT A174 | Powerplant Ignition Systems - FAA | 2.5 |
| AMT A170 | Powerplant Reciprocating Engines FAA | 6 |

| Course | Title | Units |
|--------------------|---|--------------|
| AMT A171 | Powerplant Fuel Metering, Exhaust & Induction Systems FAA | 4 |
| Units | | 12.5 |
| Semester 2 | | |
| AMT A172 | Powerplant Propeller and Lubricating Systems FAA | 4 |
| AMT A173 | Powerplant Gas Turbine Engines - FAA | 6 |
| Units | | 10 |
| Total Units | | 63 |