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POWERPLANT, ASSOCIATE IN SCIENCE DEGREE

Banner Code: 1_AS_AMPP **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. This certificate would enable a student to achieve employment in local powerplant and propeller overhaul facilities and repair stations.

Complete the Powerplant Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

Program Outcomes

- Have the necessary skills and training for proficiency in taking written, oral and practical exams for Powerplant certification which may be required for employment.
- 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/associate-degree/) and General Education (https://catalog.cccd.edu/orange-coast/general-education-patterns/).

| Course | Title | Units |
|-------------------------|---|-------|
| Required Courses | | |
| AMT A150 | General Maintenance Records - FAA | |
| AMT A151 | General Electricity - FAA | |
| AMT A152 | General Airframe & Powerplant Fuel Systems - FAA | |
| AMT A153 | General Materials, Processes & Welding - FAA | |
| AMT A154 | General Weight & Balance, Math & Physics - FAA | 3 |
| AMT A155 | General Blueprint Reading & Drafting - FAA | 2 |
| 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 | |
| AMT A173 | Powerplant Gas Turbine Engines - FAA | 6 |
| AMT A174 | Powerplant Ignition Systems - FAA | 2.5 |
| AMT A180 | Airframe and Powerplant Instrumentation FAA | 2.5 |
| Total Units | | 42 |

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Powerplant written examination.

| Requirement | Units |
|--|--------|
| Program Major Units | 42 |
| AS General Education Option 1, 2, or 3 | Varies |
| Transferable electives to satisfy unit requirement | Varies |
| Total Minimum Degree Units | 60 |

Program Sequence

These sequences at Orange Coast College are general course curriculum maps for students to finish all major and general education requirements for two-year completion of degrees, and/or fulfillment of transfer requirements. The course sequence may include course prerequisites and other placement requirements. Students are advised to meet with an Orange Coast College Counselor to review course selections and sequences to ensure that completion of this program will meet a student's transfer and career goals.

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

| Course | Title | |
|--|---|-----------|
| Year 1 | | |
| Semester 1 | | |
| AMT A150 | General Maintenance Records - FAA | |
| AMT A151 | General Electricity - FAA | |
| AMT A152 | General Airframe & Powerplant Fuel Systems - FAA | |
| AMT A153 | General Materials, Processes & Welding - FAA | |
| AMT A154 | General Weight & Balance, Math & Physics - FAA | |
| | Units | 15 |
| Semester 2 | | |
| AMT A172 | Powerplant Propeller and Lubricating Systems FAA | |
| AMT A173 | Powerplant Gas Turbine Engines - FAA | |
| AMT A155 | General Blueprint Reading & Drafting - FAA | |
| AMT A180 | Airframe and Powerplant Instrumentation 2 | |
| Select one of the following or satisfy Math competency (completion of High School Algebra 2 with a "C" or better): | | |
| MATH A030 or MATH A045 | Intermediate Algebra ¹ or Combined Elementary and Intermediate Algebra | |
| | Units | 14.5-18.5 |
| Year 2 | | |
| Semester 1 | | |
| AMT A174 | Powerplant Ignition Systems - FAA 2 | |
| AMT A170 | Powerplant Reciprocating Engines FAA | |
| AMT A171 | Powerplant Fuel Metering, Exhaust & Induction Systems FAA | |
| OCC AS GE AREA A1- | CHOOSE ONE | 3 |
| | Units | 15.5 |
| Semester 2 | | |
| 000 40 05 4554 00 | OLIOCOF ONE | ^ |

OCC AS GE AREA C2- CHOOSE ONE

Powerplant, Associate in Science Degree

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| Course | Title | Units |
|------------------------------|----------------------------------|-------|
| OCC AS GE AREA D- CHOOSE ONE | | 3 |
| OCC AS GE | AREA A2- CHOOSE ONE ² | 3-4 |
| OCC AS GE | AREA B- CHOOSE ONE | 3-4 |
| OCC AS GE | AREA C1- CHOOSE ONE | 3 |
| Units | | 15-17 |
| Total Units | | 60-66 |

Math A030 or higher; *100-level Math courses satisfy AS Math Requirement and OCC AS GE AREA A2
OCC AS GE AREA A2 - Required if 100-level MATH will not be taken to meet Math competency. If MATH A100 or higher will be taken, then needs to take 3-4 degree applicable elective units