



AVIATION MECHANICS • AIRFRAME AND POWERPLANT

- Associate of Applied Science
- College Certificate

About The Program

The Aviation Mechanics program offers two options: Airframe and Powerplant. It is designed to prepare students for entry into a variety of occupations, which require competence in the two basic areas of airframe and power plant technology. Students completing either the certificate or the Associate of Applied Science Degree will be qualified to obtain a Federal Aviation Administration (FAA) Certificate and be licensed as an airframe or powerplant technician. Students seeking career advancement in the field or transfer to a four-year institution should elect the Associate of Applied Science Degree. Students who wish to prepare only for the FAA license should select the certificate program.

Career Potential

- Airframe Technician
- Powerplant Technician

Admission Requirements

Students are required to complete the following:

- Fulfill all WCCCD admission requirements.
- Declare program intent on the WCCCD admission application or change the program intent at the campus admission office.
- Fulfill course placement requirements based on COMPASS test.
- Students must complete WCCCD program admission applications during the semester they are enrolled in any APM course and submit the program application to the Campus Academic Officer.
- Students must complete all core course work with a grade of "C" or better to meet graduation requirements.

Airframe Associate of Applied Science Degree Requirements

GENERAL EDUCATION COURSES

| | | |
|---------|--------------------------------|---|
| ENG 119 | English I | 3 |
| ENG 134 | Technical Communications | 3 |
| MAT 121 | Technical Mathematics I | 3 |
| MAT 122 | Technical Mathematics II | 3 |
| PS 101 | American Government Humanities | 3 |
| - OR - | | |
| | Social Science Elective | 3 |

CAREER COURSES

| | | |
|---------|--|---|
| APM 110 | Aviation Mathematics | 3 |
| APM 111 | Basic Electricity | 3 |
| APM 114 | Materials and Processes | 3 |
| APM 115 | Aircraft Drawing | 2 |
| APM 116 | Maintenance Forms and Certifications | 2 |
| APM 117 | Cleaning and Corrosion Control | 2 |
| APM 118 | Tests, Preparation and Practice | 3 |
| APM 119 | Basic Physics, Aerodynamics, Weight and Balance | 3 |
| AFM 217 | Repair of Wood, Fabric, and Finishing | 3 |
| AFM 218 | Sheet Metal I | 3 |
| AFM 219 | Sheet Metal II | 3 |
| AFM 220 | Aircraft Welding | 2 |
| AFM 221 | Assembly and Rigging | 5 |
| AFM 319 | Hydraulics, Pneumatic Lines, Fittings | 3 |
| AFM 320 | Landing Gear Systems | 3 |
| AFM 321 | Cabin Atmosphere, Communication and Navigation Systems | 3 |
| AFM 322 | Electrical Systems I | 2 |
| AFM 323 | Electrical Systems II | 3 |
| AFM 324 | Fuel, Ice, Rain, and Fire Systems | 3 |
| AFM 325 | Tests, Preparation, and Practice | 3 |
| EMT 101 | First Aid | 2 |
| LS 204 | Occupational Safety and Health | 3 |

PROGRAM TOTAL CREDITS 80

* Program totals may not include prerequisite work.

Airframe College Certificate Requirements

CAREER COURSES

| | | |
|---------|--|---|
| APM 110 | Aviation Mathematics | 3 |
| APM 111 | Basic Electricity | 3 |
| APM 114 | Materials and Processes | 3 |
| APM 115 | Aircraft Drawing | 2 |
| APM 116 | Maintenance Forms and Certifications | 2 |
| APM 117 | Cleaning and Corrosion Control | 2 |
| APM 118 | Tests, Preparation and Practice | 3 |
| APM 119 | Basic Physics, Aerodynamics, Weight and Balance | 3 |
| AFM 217 | Repair of Wood, Fabric, and Finishing | 3 |
| AFM 218 | Sheet Metal I | 3 |
| AFM 219 | Sheet Metal II | 3 |
| AFM 220 | Aircraft Welding | 2 |
| AFM 221 | Assembly and Rigging | 5 |
| AFM 319 | Hydraulics, Pneumatic Lines, Fitting | 3 |
| AFM 320 | Landing Gear Systems | 3 |
| AFM 321 | Cabin Atmosphere, Communication and Navigation Systems | 3 |
| AFM 322 | Electrical Systems I | 2 |
| AFM 323 | Electrical Systems II | 3 |
| AFM 324 | Fuel, Ice, Rain, and Fire Systems | 3 |
| AFM 325 | Tests, Preparation, and Practice | 3 |
| EMT 101 | First Aid | 2 |
| LS 204 | Occupational Safety and Health | 3 |

CERTIFICATE TOTAL CREDITS 62

* Certificate totals may not include prerequisite work.

District Office

801 West Fort Street
Detroit, MI 48226

General Information Number:
(313) 496-2600

Career Program Hotline:
1-800-300-2118

Information Website:
www.wcccd.edu

E-mail:
info@wcccd.edu

Powerplant Associate of Applied Science Degree Requirements

GENERAL EDUCATION COURSES

| | | |
|---------|---|---|
| ENG 119 | English I | 3 |
| ENG 134 | Technical Communications | 3 |
| MAT 121 | Technical Mathematics I | 3 |
| PS 101 | American Government Humanities, Natural Science | 3 |
| - OR - | | |
| | Social Science Elective | 4 |
| | Other | 6 |

CAREER COURSES

| | | |
|---------|---|---|
| APM 110 | Aviation Mathematics | 3 |
| APM 111 | Basic Electricity | 3 |
| APM 114 | Materials and Processes | 3 |
| APM 115 | Aircraft Drawings | 2 |
| APM 116 | Maintenance Forms | 2 |
| APM 117 | Cleaning and Corrosion Control | 2 |
| APM 118 | Test Preparation and Practice | 3 |
| EMT 101 | First Aid | 2 |
| PPM 211 | Reciprocating Engines I | 3 |
| PPM 212 | Reciprocating Engines II | 3 |
| PPM 216 | Reciprocating Engines III | 3 |
| PPM 217 | Lubrication Systems | 3 |
| PPM 218 | Turbine Engines and Ground Control | 4 |
| PPM 301 | Basic Physics, Aerodynamics, Weight and Balance | 3 |
| PPM 302 | Engine Electrical Systems II | 3 |
| PPM 303 | Ignition Systems | 3 |
| PPM 304 | Cooling Induction and Exhaust Systems | 3 |
| PPM 305 | Fuel Metering | 3 |
| PPM 306 | Propellers | 3 |
| PPM 307 | Tests, Preparation and Practice | 3 |

PROGRAM TOTAL CREDITS 79

* Program totals may not include prerequisite work.

Powerplant College Certificate Requirements

CAREER COURSES

| | | |
|---------|---|---|
| APM 110 | Aviation Mathematics | 3 |
| APM 111 | Basic Electricity | 3 |
| APM 114 | Materials and Processes | 3 |
| APM 115 | Aircraft Drawings | 2 |
| APM 116 | Maintenance Forms | 2 |
| APM 117 | Cleaning and Corrosion Control | 2 |
| APM 118 | Test Preparation and Practice | 3 |
| EMT 101 | First Aid | 2 |
| PPM 211 | Reciprocating Engines I | 3 |
| PPM 212 | Reciprocating Engines II | 3 |
| PPM216 | Reciprocating Engines III | 3 |
| PPM 217 | Lubrication Systems | 3 |
| PPM 218 | Turbine Engines and Ground Control | 4 |
| PPM 301 | Basic Physics, Aerodynamics, Weight and Balance | 3 |
| PPM 302 | Engine Electrical Systems II | 3 |
| PPM 303 | Ignition Systems | 3 |
| PPM 304 | Cooling Induction and Exhaust Systems | 3 |
| PPM 305 | Fuel Metering | 3 |
| PPM 306 | Propellers | 3 |
| PPM 307 | Tests, Preparation and Practice | 3 |

CERTIFICATE TOTAL CREDITS 57

* Certificate totals may not include prerequisite work.

It is the policy of WCCCD that no person, on the basis of race, color, religion, national origin, age, sex, height, weight, marital status, disability, or political affiliation or belief, shall be discriminated against, excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in employment or in any program or activity for which it is responsible or for which it receives financial assistance from the U.S. Department of Education.

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