



Powerplant Maintenance Technology A.A.S.

Curriculum Code: 0745

Effective: Fall 2021 – Summer 2026

Description

Powerplant Maintenance Technicians maintain aircraft in accordance with the Federal Aviation Regulations. Technicians perform inspections, repairs and alterations to aircraft powerplants, propellers and their related systems. In addition, they troubleshoot the operation of induction, cooling, exhaust, fuel metering, ignition, electrical, starting, lubrication propeller and other associated systems. Powerplant maintenance technicians are employed throughout the world maintaining aircraft for major air carriers, commuter airlines, air freight operators, corporate flight departments, fixed base operators and a variety of other specialized aviation businesses. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

Contact Information

Contact the Aviation Technology Program at the Mason-Jewett Field, 655 Aviation Drive, Mason, telephone number 517-483-1406.

General Education - Applied Degrees, Recommended Courses

(For the full list of options, see [General Education](#))

- English Composition or Applied English – *Select one*
ENGL 121, Composition I, 4 credits / 4 billing hours
ENGL 124, Technical Writing, 3 credits / 3 billing hours
ENGL 127, Business Writing, 3 credits / 3 billing hours
- English Composition (Second Course)/Communications or Applied Communications – *Select one*
COMM 110, Communication in the Workplace, 3 credits / 3 billing hours
COMM 120, Dynamics of Communication, 3 credits / 3 billing hours
COMM 130, Fundamentals Public Speaking, 3 credits / 3 billing hours
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences – *Select one*
HUMS 213, World Civilizations to 1600, 4 credits / 4 billing hours
HUMS 214, World Civilizations from 1600, 4 credits / 4 billing hours
MGMT 234, Diversity in the Workplace, 3 credits / 3 billing hours
SOCL 120, Introduction to Sociology, 4 credits / 4 billing hours
- Mathematics/Applied Mathematics – *Select one*
MATH 117, Math for Business, 4 credits / 4 billing hours
MATH 119, Math - Applications for Living, 4 credits / 4 billing hours

- Natural Sciences Lab or Applied Science and Technology Lab – *Select one*
 ASTR 201, Introductory Astronomy, 4 credits / 5 billing hours
 BIOL 120, Environmental Science, 4 credits / 6 billing hours

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
AVAF 212	Aircraft Electrical II	4 / 5.75
AVGM 111	Aviation General I	4 / 5
AVGM 112	Aviation General II	6 / 8
AVGM 113	Aviation General III	4 / 5
AVGM 114	Materials and Processes	5 / 7
AVPP 241	Reciprocating Engine	8 / 11.25
AVPP 251	Reciprocating Engine Systems	2 / 2.5
AVPP 253	Reciprocating Ignition Systems	5 / 6.75
AVPP 255	Reciprocating Induction Sys	4 / 5.5
AVPP 257	Aircraft Propeller Systems	4 / 5.5
AVPP 259	Turbine Engine I	4 / 5.5
AVPP 261	Turbine Engine II	4 / 5.5
AVPP 263	Turbine Engine Systems	2 / 2.75
AVPP 265	Powerplant Instruments	2 / 2.5
AVPP 267	Powerplant Certification	1 / 1.5

Total Credit Hours

76-78 credits / 98-101 billing hours

Recommended Course Sequence

Semester I (Fall)	Semester II (Spring)
AVGM 111	AVPP 251
AVGM 112	AVPP 253
AVGM 113	AVPP 255
AVGM 114	AVPP 257
	AVPP 259

Semester III (Summer)	Semester IV (Fall)
AVAF 212	Gen Ed – English Composition or Applied English
AVPP 261	Gen Ed – Mathematics or Applied Mathematics
AVPP 263	AVPP 241
AVPP 265	
AVPP 267	

Semester V (Spring)

Gen Ed – English Composition (Second Course)/Communications or Applied Communications

Gen Ed – Humanities and Fine Arts or Social Sciences or Applied Social Sciences

Gen Ed – Natural Sciences Lab or Applied Science and Technology Lab