Aviation Maintenance Management, A.S. Degree

Program Information

A.S. Degree - Code 224100 Catalog 2026/2027

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Program Mission, Description, and Outcomes

Mission

Our mission is to provide comprehensive education and training in airframe and powerplant maintenance, empowering students with the knowledge, skills and ethics required for success in the aviation industry. Through rigorous coursework, hands-on experience, and adherence to Federal Aviation Administration (FAA) regulations, we strive to cultivate proficient, safety-conscious professionals who uphold the highest standards of aircraft maintenance excellence.

Description

The program combines industry-standard technical training in aircraft maintenance with managerial skills essential for overseeing aviation maintenance operations. Students learn aircraft systems, regulations, and maintenance procedures alongside topics like logistics, safety management, and team leadership, preparing them for careers as airframe and powerplant mechanics.

Outcomes

Graduates of the program will be able to:

1. Demonstrate proficient knowledge of aviation regulations, standards, and procedures relevant to airframe and powerplant maintenance.
2. Perform aircraft inspections, identify discrepancies, and determine appropriate corrective actions in compliance with FAA standards.
3. Apply principles of physics, aerodynamics, and materials science to understand aircraft structures, systems, and components.
4. Interpret aircraft technical manuals, diagrams, and schematics to troubleshoot, repair, and maintain airframe and powerplant systems.
5. Utilize specialized tools, equipment, and testing instruments to diagnose, service, and overhaul aircraft components and systems.
6. Implement safety protocols and best practices in all aspects of airframe and powerplant maintenance operations.
7. Collaborate effectively with team members and stakeholders to ensure efficient completion of maintenance tasks and projects.
8. Demonstrate proficiency in maintaining, repairing, and calibrating aircraft engines, including reciprocating engines and turbine engines.

9. Apply knowledge of electrical, hydraulic, pneumatic, and fuel systems to install, troubleshoot, and repair aircraft components.
10. Prepare accurate maintenance records, documentation, and reports in accordance with FAA regulations and industry standards.

Additional Admission Requirements

- Have a standard high school diploma or GED.
- Provide an official transcript from all previous institutions attended.
  International Students
- Provide transcripts evaluated by a member of the National Association of Credential Evaluation Services (NACES) naces.org/members.htm
- Achieve specified minimum scores on the Test of English as a Foreign Language (TOEFL).

Additional Completion Requirements

- Earn a grade "C" or better in all program specific and general education courses.

General Education

Communications Core (3 credits)

Course Prefix and Number	Course Title	Credits
ENC 1101	English Composition I	3

Mathematics Core (3 credits)

MAC 1105	College Algebra	3

Natural Sciences Core (3 credits)

PHY 1020	Conceptual Physics	3

Social Sciences Core (6 credits)

PSY 1012	Introduction to Psychology	3
Choose One of the Following:		
POS 2041	American Federal Government	3
AMH 2020	United States History 1865 to the Present	3
AMH 2010	United States History to 1877	3

POS2041, AMH2010, AMH2020: These courses satisfy the Civic Literacy Competency graduation requirement.

Humanities Core (3 credits)

Choose One of the Following:

ARH 1000	Art Appreciation	3
HUM 2020	Introduction to Humanities	3

LIT 2000	Introduction to Literature	3
MUL 1010	Music Appreciation	3
PHI 2010	Introduction to Philosophy	3
THE 1000	Theatre Appreciation	3

Total: 18

Program Specific Courses

Course Prefix and Number	Course Title	Credits Hrs.
AMT 1751C	Aviation Maintenance Technology General I	6
AMT 1752C	Aviation Maintenance Technology General II	6
AMT 1781C	Aviation Maintenance Technology Airframe I	6
AMT 1782C	Aviation Maintenance Technology Airframe II	6
AMT 1783C	Aviation Maintenance Technology Airframe III	6
AMT 1784C	Aviation Maintenance Technology Airframe IV	6
AMT 1786C	Aviation Maintenance Technology Powerplant I	6
AMT 1786C	Aviation Maintenance Technology Powerplant II	6
AMT 1787C	Aviation Maintenance Technology Powerplant III	6
AMT 1788C	Aviation Maintenance Technology Powerplant IV	6
AVM 1931	Aviation Capstone	5
Total		65

Sample Program of Study

7 hours a day | Monday – Thursday

Year 1

1st Semester

Course Prefix and Number	Course Title	Credits/ C Hrs.
AMT 1751C	General I	6
AMT 1752C	General II	6
ENC 1101	Introduction to Composition	3
Total		**15**

2nd Semester

AMT 1781C	Airframe I	6
AMT 1782C	Airframe II	6
MAC 1105	College Algebra	3
Total:		**15**

3rd Semester

AMT 1783C	Airframe III	6
AMT 1784C	Airframe IV	6
PHY 1020	Conceptual Physics	3
PSY 1012	Introduction to Psychology	3
Total:		**18**

Year 2

1st Semester

AMT 1785C	Powerplant I	6
AMT 1786C	Powerplant II	6
Social Sciences Gen Ed		3
Total:		**15**

2nd Semester

AMT 1787C	Powerplant III	6
AMT 1788C	Powerplant IV	6
Humanities Gen Ed		3
AVM 1931	Aviation Capstone	5
Total:		**20**

Note: Sequence of courses may vary. Check catalog course descriptions for requisite requirements.