

A.S. in Aviation Maintenance Science (Part 147)

The Associate in Science in Aviation Maintenance Science (AMS) is designed for students seeking to work as aviation technicians or in related roles. The program includes coursework in the operation and maintenance of commercial, private and military aircraft, airframe and powerplant structures, and systems. Laboratory instruction supports the development of skills in interpreting technical documentation, conducting inspections and performing repairs related to aircraft safety and airworthiness. The program includes development of critical-thinking and problem-solving skills.

At the **Daytona Beach Campus**, the Aviation Maintenance Science program prepares students to take the FAA Airframe and Powerplant (A&P) certification exams. Students who already hold certification may receive transfer credit.

Program-Level Student Learning Outcomes

Students will:

- Engage in lifelong learning relevant to their work environment.
- Interpret written and electronic technical instructions.
- Apply aviation mathematics and physics to aircraft airworthiness issues.
- Use special equipment and tools in aviation maintenance practice.
- Use their technical competence to solve complex aviation maintenance problems.
- Communicate knowledge of aviation maintenance industry issues in written and spoken formats.
- Show knowledge of the aviation environment by returning aircraft to service in various environments.
- Identify leadership and management issues in teamwork and supervisory roles.
- Demonstrate professional and ethical behavior as maintenance technicians and supervisors.

Daytona Beach Program Requirements

General Education Requirements	18
Core Requirements	48
Total Credits	66

General Education Requirements

Communication	6
COMM 122 English Composition	
COMM 219 Speech	
or COMM 22 Technical Communication	
Humanities - Lower Level	3
Social Sciences - Lower Level	3
PSYC 101 Introduction to Psychology	
Computer Science/Information Technology	3
Mathematics	3
MATH 111 Pre-calculus for Aviation	
or MATH 14 College Algebra	
Total Credits	18

Core Requirements

AMST 115	Aviation Mathematics and Physics	2
AMST 116	Fundamentals of Electricity	4
AMST 117	Tools, Materials and Processes	4
AMST 118	Aircraft Familiarization and Regulations	2
AMST 261	Aircraft Metallic Structures	3
AMST 262	Aircraft Composite Structures	3
AMST 263	General Aviation Aircraft Systems	3
AMST 264	General Aviation Aircraft Electrical and Instrument Systems	3
AMST 271	Aircraft Reciprocating Powerplant and Systems	3
AMST 272	Powerplant Electrical and Instrument Systems	3
AMST 273	Propeller Systems	2
AMST 274	Aircraft Turbines Powerplants and Systems	4
AMST 365	Transport Category Aircraft Systems	3
AMST 366	Transport Category Aircraft Electrical and Instrument Systems	3
AMST 375	Repair Station Operations	3
AMST 376	Powerplant Line Maintenance	3
Total Credits		48

Suggested Plan of Study

Year One

Requirements	Credits
AMST 115 - Aviation Mathematics and Physics	2
AMST 116 - Fundamentals of Electricity	4
AMST 117 - Tools, Materials and Processes	4
AMST 118 - Aircraft Familiarization and Regulations	2
COMM 122 - English Composition	3
Semester Hours	15

Requirements	Credits
AMST 261 - Aircraft Metallic Structures	3
AMST 262 - Aircraft Composite Structures	3
AMST 263 - General Aviation Aircraft Systems	3
AMST 264 - General Aviation Aircraft Electrical and Instrument Systems	3
Semester Hours	12

Requirements	Credits
AMST 365 - Transport Category Aircraft Systems	3
AMST 366 - Transport Category Aircraft Electrical and Instrument Systems	3
AMST 271 - Aircraft Reciprocating Powerplant and Systems	3
AMST 272 - Powerplant Electrical and Instrument Systems	3
Semester Hours	12

Total Credits

Total Hours for All Requirements: 39

Year Two

Requirements	Credits
AMST 273 - Propeller Systems	2
AMST 274 - Aircraft Turbines Powerplants and Systems	4
AMST 375 - Repair Station Operations	3
AMST 376 - Powerplant Line Maintenance	3
Semester Hours	12

Requirements	Credits
PSYC 101 - Introduction to Psychology	3
MATH 111 - Pre-calculus for Aviation	3
CPSC 120 - Introduction to Computing in Aviation	3
COMM 219 - Speech or 221 - Technical Communication	3
Humanities - Lower Level	3
Semester Hours	15

Total Credits

Total Hours for All Requirements: 27

Year Three

Requirements	Credits
AMST 273 - Propeller Systems	2
AMST 274 - Aircraft Turbines Powerplants and Systems	4
AMST 375 - Repair Station Operations	3
AMST 376 - Powerplant Line Maintenance	3
Semester Hours	12

Total Credits

Total Hours for All Requirements: 12