

Academic Programs at the Daytona Beach Campus

Aeronautics

Bachelor of Science

The Aeronautics degree is designed specifically for students who work, have worked, or desire to work in aviation-related careers. For students with existing aviation-related knowledge and skills, this degree acknowledges a student's valuable acquired experience through the award of advanced standing prior-learning credit. The curriculum then builds on those skills and knowledge. The program also provides an opportunity for those students new to aviation to acquire aviation-specific knowledge through aviation-related coursework. This combination of a student's aviation learning, aviation courses, business, computer science, economics, humanities, communications, social sciences, mathematics, and physical sciences, along with professional development elective courses and a minor course of study, will prepare graduates for a career in an aviation-related field.

Aviation Area of Concentration

The Aviation Area of Concentration is the degree component that lets students select courses from various aviation-related fields. In addition, the AOC portion of the degree is where credit for prior aviation learning is applied. Thirty-six hours of credit are needed to satisfy the requirements of this portion of the Aeronautics degree. All or part of the credit needed for this degree requirement may be awarded based on prior aviation training or experience. To complete the AOC, in addition to any prior learning credit, students may select from courses in Aeronautical

Science, Aerospace Electronics, Air Traffic Management, Applied Meteorology (aviation-related), Aviation Maintenance Science, Cooperative Education, Electronics, Flight, Homeland Security, Safety (aviation-related), Simulation, or Space Studies.

Evidence of Prior Aviation Learning

Applicants who qualify for admission to and matriculate in the degree program may be eligible for credit for prior learning. Applicants must be able to prove competence in an aviation occupation with authentic documentary evidence. Training and experience in closely related occupations can be combined.

Just as official transcripts are required to transfer credit from one university to another, original or authenticated documentation of prior learning from professional training and experience must be presented to qualify for award of Aviation Area of Concentration credit. Documentary evidence must be from objective third-party sources and must clearly describe the applicant's professional training, duties, and achievements in detail. Advanced standing credit will be awarded in accordance with the applicable Embry-Riddle Aeronautical University Curriculum Manual.

Duplicate Credit

Many Embry-Riddle courses are designed to teach the same skills and knowledge that Aeronautics students have acquired through experience and training. Students who com-

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plete courses in the same aviation specialty for which they were granted Aviation Area of Concentration credit would be duplicating coverage of the same subject matter. Credit for completion of such courses will not be applied to degree requirements. Credit for prior learning granted in the Aeronautics degree program may not be transferable to any other Embry-Riddle degree program.

Minor

Students must select and complete one minor field of study. Total credits in the minor will vary depending on which minor is chosen. Students typically select a minor that will enhance their aviation career. Courses required for the minor field of study may be used to fill Area of Concentration, Professional Development, or Open Elective degree requirements. See Minor Courses of Study in this catalog.

Aeronautics Curriculum

The curriculum to be followed by each student will vary depending on any AOC prior learning or transfer credits granted.

Curriculum

Course	Credits
Aviation Area of Concentration	36
Advanced standing credit and/or non-duplicating credit from AEL, AMS, AS, AT, CEA, EL, FA, HS, SF, SIM, SP, or WX courses.	
Communication Theory and Skills*	9
Humanities/Social Sciences*	12
Lower-Level Humanities Elective	3
Lower-Level Social Sciences Elective (PSY 101 and/or Lower-Level SS)	6
Upper-Level HU or SS Elective	3
Computer Science Elective	3
Mathematics**	6
College Algebra or Higher-Level Mathematics	3
MA 112 College Mathematics for Aviation II -OR-	
MA 222 Business Statistics -OR-	

Higher-Level Mathematics	3
Physical Sciences**	6
Physical and Life Sciences Elective	
One course must include a laboratory.	
Program Support	12
AS 254 Aviation Legislation	3
AS 405 Aviation Law	3
BA 201 Principles of Management -OR-	
BA 210 Financial Accounting	3
EC 200 An Economic Survey -OR-	
EC 210 Microeconomics -OR-	
EC 211 Macroeconomics	3
Professional Development Electives	21
Select from Upper-Division (300-400) courses in AEL, AMS, AS, AT, BA, CEA, CS, EC, EL, HS, IT, LET, SF, SIM, SP, WX	
Open Electives	15
TOTAL DEGREE CREDITS	120

* Embry-Riddle courses in the general education categories of Communication Theory and Skills, Humanities, and Social Sciences may be chosen from those listed below, assuming prerequisite requirements are met. Courses from other institutions are acceptable if they fall into these broad categories and are at the level specified in the Aeronautics vertical outline. Other courses may also be used with permission of the undergraduate program coordinator.

Communication Theory and Skills

COM 122, 219, 221, 222, 415

Humanities

HU 140 to HU 146

Social Sciences

LOWER-LEVEL:

100-200 Level

UPPER-LEVEL:

300-400 Level

HF 300, PSY 350

Dependent on the amount of upper-level Aviation Area of Concentration credit applied, some of the open or Communication/Humanities/Social Sciences electives in the B.S. degree may have to be 300-400 level courses to satisfy the graduation requirement of 39 credits of upper-level courses.

Cooperative Education credits may be used as open electives; however, assignments may not be in the student's occupational specialty.

** Students need to ascertain Mathematics and Physical Science pre/corequisites that are required for other courses. For example, PS 103/4 and MA 112 are required for many upper-division AS and WX courses.