

Specialized Academic Opportunities

Certificate of Study in Airworthiness Engineering

The Certificate of Study in Airworthiness Engineering (CSAE) is a unique graduate-level program focused on the science and regulatory causalities of airworthiness engineering for air-system lifecycle certification. The program concentrates on different technical and regulatory aspects of achieving and sustaining airworthiness for an air-system. The curriculum is structured to address the aerospace professional and students alike on the educational needs regarding the principles of airworthiness engineering, especially those who are engaged in the design, development, certification, production, operation, and maintenance of air-systems - either manned and uncrewed.

The CSAE program consists of 4 courses, all of which must be taken in cohort form, in sequence, and may not be separately taken. New cohorts begin each Spring term. The program is offered in blended delivery format using both synchronous Face-To-Face (FTF) and web-based instruction modalities. Upon successful completion of each course, earned graduate credit is recorded on an official transcript. Certificate credit, which serves as the core requirement for the MSAWE degree program may additionally be applied toward other master's degrees, if the recipients so choose. The CSAE requires the successful completion of all 4 courses, 12 credits, extending over a 15-month-long period.

AWE 502	Airworthiness Process & Procedures	3
AWE 510	Aircraft Airworthiness Engineering Principles	3
SYS 505	System Safety and Certification	3
UAS 501	Introduction to Uncrewed Aircraft Design	3
Total Credits		12

Aviation Maintenance Certification

Airframe and Powerplant Technician Certification

The maintenance technical track courses, which are part of the Baccalaureate and Associate of Science in Aviation Maintenance Science (AMS) degree programs, as well as a minor course of study, provides the student the necessary training to successfully attain the Federal Aviation Administration's (FAA) Airframe and Powerplant (A&P) mechanic's certification. This technical track consist of a carefully selected blend of theory and practical applications that can be completed in 16 months and is only offered at the Daytona Beach Campus.

Students perform airframe repairs and the overhaul of engines and their accessories, including those used in Embry-Riddle's pilot training fleet. The facilities, equipment, curriculum, and instructional faculty are fully credentialed and approved under Title 14 of the Code of Federal Regulations, part 147. Embry-Riddle holds an Air Agency Certificate No. NX4T404M and an FAA Repair Station Certificate No. NX42404M.

Avionics Line Maintenance Specialization

The Avionics Line Maintenance minor provides the student the necessary training to successfully obtain the Federal Communication Commission's General Radiotelephone Operator's License as well as advanced avionics training using current industry standards and procedures. Students learn basic wiring and electronic concepts, system installations, and advanced avionics line maintenance troubleshooting techniques. This minor course of study is available to students in a Baccalaureate degree that have met the pre-requisite requirements. The pre-requisite requirements are met by completing the AMS Airframe technical track or by possessing an A&P certificate.

Sources of Information

For general academic and admissions information regarding the Aviation Maintenance Science programs:

Aviation Maintenance Science Dept.
Embry-Riddle Aeronautical University
1 Aerospace Boulevard
Daytona Beach, FL 32114
1-386-226-7617 - or - 1-877-904-3746
1-386-226-6778 (fax)
<http://erau.edu/ams>