Graduate Certificate in Airworthiness Engineering

The Airworthiness Engineering Certificate is structured to address the professional educational needs of participants in the principles of airworthiness engineering, especially those individuals engaged in the design, development, certification, production, operation and maintenance of air systems - either crewed or uncrewed, at a graduate level.

Note: Certificate programs are not eligible for Title IV Federal Financial Aid unless taken as part of a degree program.

Admissions Requirements:

Official transcript(s) from the accredited degree conferring institution(s) and transcripts reflecting graduate level coursework.

- Applicants must possess a Bachelor of Science degree in Physics, Math, OR an ABET accredited (EAC) Engineering degree; exceptions to this will be reviewed on a case-by-case basis.
- Applicants must demonstrate a cumulative grade point average (CGPA) of 3.0 or higher on a 4.0 scale, at the undergraduate and graduate levels.

EXCEPTIONS: Applicants who fail to satisfy the guidelines for full admission may be considered for conditional admission under circumstances determined by the Admissions Office or Program Chair. Applicants will be required to submit the following documentation in addition to official transcripts:

Resume outlining work experience, education, relevant activities or awards
Statement of Objective, to include:

- A description of the applicant's reasons for wishing to do graduate work in the field chosen.
- A description of the applicant's interests and background.
- A description of the applicant's long term professional goals, defining how Embry-Riddle's program supports those interests and goals.

3 Letters of Recommendation, with at least two letters from recent instructors, if available; otherwise, professional references will be considered.

Airworthiness Engineering

Certificate

AWEN 502	Airworthiness Process and Procedures	3
SYSE 505	System Safety and Certification	3
UASE 501	Introduction to Uncrewed Aircraft Systems Design	3
AWEN 510	Aircraft Airworthiness Engineering Principles	3
Total Credits		**12**

Estimated Cost of Attendance

Students will:

- Exhibit an understanding of how civil and military regulatory frameworks, National and International, apply to contemporary issues in air system certification.
- Perform engineering analysis using acceptable methods for substantiating airworthiness compliance to requirements.
- Effectively communicate information, both technical and procedural, in written and oral forms to audiences in the aviation and aerospace disciplines.
- Make use of investigative methods to derive innovative airworthiness compliance solutions over the life cycle.
- Demonstrate topic mastery of airworthiness engineering principles and processes for selected technical discipline areas in air system certification.
- Recognize the importance of honest and ethical behavior concerning airworthiness in all their work, their spoken statements, and their written artifacts.