

Undergraduate Certificate in Engineering Fundamentals

Crafted for students interested in careers or advanced studies in STEM fields, Embry#Riddle's Undergraduate Certificate in Engineering Fundamentals is designed to provide a comprehensive overview of essential engineering fundamentals, including courses in math, physics, computer programming, and graphic design. The program gives students the foundational knowledge necessary to comprehend, analyze, and face engineering challenges head-on, emphasizing problem-solving techniques that can be utilized throughout the entirety of their education and career.

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

Program-Level Student Learning Outcomes

Students will:

- Employ skills commonly found in the engineering profession, such as problem-solving, knowledge of the principles of structural engineering and mechanics, engineering design using CAD, algorithm design and software development, implementation of code, and testing.
- Explain professional and ethical responsibilities.

Worldwide Certificate Requirements

MATH 242	Calculus and Analytical Geometry II	4
PHYS 250	Physics with Calculus III	3
PHYS 250W	Physics with Calculus III Laboratory	2
ESCI 201	Statics	3
ENGR 101W	Introduction to Engineering	3
ENGR 115	Introduction to Computing for Engineers	3
ENGR 120	Graphical Communications	3
Total Credits		21