

B.S. in Civil Engineering

Civil engineers are essential to modern society and with strong current demand for recent graduates, the field is expected to grow rapidly in the future — especially in the areas of aviation planning, infrastructure, and environmental sustainability and resiliency. Space utilization and exploration initiatives are certain to produce further demand for civil engineers with an understanding of the aviation and aerospace industries. The Civil Engineering program at Embry-Riddle is uniquely designed to produce graduates with the types of skills and experiences that employers in these lucrative fields find highly desirable.

Graduates of the Civil Engineering program will leave the University with an understanding of the classical areas of civil engineering with emphasis on transportation, geotechnical, environmental, and structural design developed through a carefully planned series of courses and laboratories. Small class size and personal attention allow the interjection of practical interdisciplinary design projects throughout the curriculum. The Civil Engineering program at Embry-Riddle prides itself on teaching through mentorship and has strong ties with alumni working in both the public and private sectors

The Civil Engineering Program Educational Objectives are:

In a few years after graduation, Civil Engineering alumni are expected to have successful engineering careers as productive members or leaders within teams, or organizations, or as independent entrepreneurs, or will be engaged in advanced studies. As creative thinkers and practical problem solvers, they will have contributed to finding solutions to civil, aerospace, or aviation design and construction projects to the betterment of modern society.

Furthermore, Civil Engineering alumni are expected to be responsible and ethical members of society and the engineering profession and to pursue professional licensure and personal development through continuing education and active participation in professional organizations.

The Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

Admission Requirements

To enter this program, students should have demonstrated competence in mathematics, physics, and chemistry in high school. They should be prepared to enter Calculus I, having demonstrated proficiency in algebra and trigonometry. Students who wish to strengthen their background in mathematics and physical science should consult the program chair for guidance before enrolling in the prescribed courses.

Degree Requirements

The Bachelor of Science in Civil Engineering program requires successful completion of a minimum of 129 semester hours. The program may be completed in eight regular semesters, assuming appropriate background and full-time enrollment. A minimum cumulative grade point average of 2.0 is needed for all required CIV, AE, EE, EGR, and ES courses, including engineering electives.