

Computer Engineering at ERAU

The expertise of our faculty, our state-of-the-art facilities, and our comprehensive curriculum help you develop your potential as a computer engineer.

A wide range of hardware and software development tools and resources are available in our Team Software Development environments and Real-Time Systems laboratories.

Being located at Embry-Riddle allows us to take advantage of a wealth of knowledge and expertise on campus in all things aviation and aerospace, providing opportunities for practical engineering experiences.

Quality education involves more than equipment and laboratories: Our small class sizes provide for effective one-to-one interaction with faculty. Our faculty have a wide range of industrial and research experiences that complement their teaching and provide insight into how your education is translated into real-world practices. Our student organizations like the IEEE help students transition to professional careers. And our student projects are second to none in providing hands-on opportunities to students from freshmen to seniors.



EMBRY-RIDDLE
Aeronautical University.



*Besides the technical skills,
Embry-Riddle's focus on teamwork
has served me well. The smaller
class sizes at Embry-Riddle makes
for a personal academic experience
There was never a time I
couldn't get in touch with a professor
to ask a question or go over a
difficult problem.*

Todd Sherman, BSCE 2004

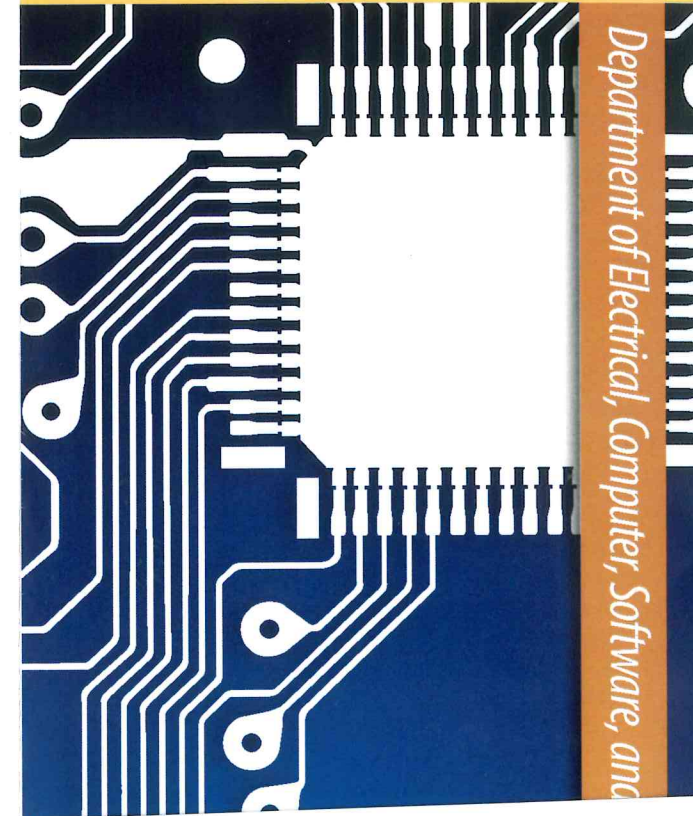
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EMBRY-RIDDLE
Aeronautical University.

Bachelor of Science in Computer Engineering



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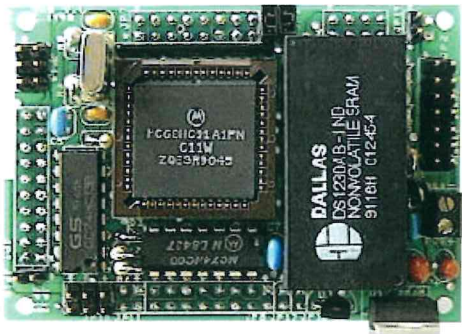
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embryriddle.edu

What is Computer Engineering?

While you'd be right to think that computer engineers design the desktop and laptop computer systems you use every day, you might not know that those same computer engineers analyze, design, develop, and maintain digital systems ranging in size from tiny biomedical implants to huge multicomputer defense and security systems. Computer engineers improve lives around the world by bringing digital technologies like the Global Positioning System to your new cell phone and to the cockpit of the most recently designed aircraft.

As a graduate of the Computer Engineering program at ERAU-DB, you're ready to change the world with your knowledge of real-time highly-reliable computer hardware, as well as with your ability to work with others on multidisciplinary teams. Having completed student projects in unmanned aircraft, robotics, or the GM EcoCar, for example, you'll practice from day one the projects that make life better for people all around the globe.



The Bachelor of Science in Computer Engineering

This BSCE degree program is composed of courses in digital hardware, software, math and science, and general education. Students are encouraged to complete minors in related areas of interest such as business administration, human factors, or mathematics.

The curriculum provides preparation for computer engineering professionals who can develop today's real-time highly reliable systems.

First Year

Introduction to Engineering
Introduction to Computing for Engineers
Introduction to OO Programming
Calculus I and II
Physics I and II
English Composition and Literature
Social Sciences and Humanities Electives
College Success

Second Year

Digital Circuit Design
Microprocessor Systems
Introduction to Discrete Structures
Calculus III
Differential Equations
Physics III for Engineers
Speech
Technical Report Writing

Third Year

Computing in Aerospace and Aviation
Digital System Design with Aerospace Applications
Signals and Systems
Operating Systems
Real-time Systems
Software Engineering Practices
Engineering Economics Probability and Statistics
Humanities / Social Sciences Elective

Fourth Year

Computer Systems Design I and II (Senior Design)
Computer Architecture
Telecommunication Systems
Computer Engineering Elective
Humanities / Social Sciences Elective
Specified Electives

BSCE students can receive academic credit for industry cooperative programs and internships, and for undergraduate research. These opportunities open doors to employment opportunities and graduate studies.

Undergraduate honors programs are available.

Accelerated Masters Degrees

Two options are available for qualified students interested in completing a graduate degree on top of the Bachelor of Science in Computer Engineering.

The Five-Year BSCE + MSE program allows students to complete both the BSCE and Master of Software Engineering degrees. The program, which requires two semesters of internship, produces engineers with advanced abilities in digital hardware and computer software.

The Accelerated MSECE program lets students complete both the BSCE and Master of Science in Electrical and Computer Engineering programs. The combination allows either additional depth in computer engineering topics or a breadth of content across both computer and electrical engineering.

Students in the both programs are required to maintain a high level of academic performance.

For complete degree program details, see <http://daytonabeach.erau.edu/degrees>

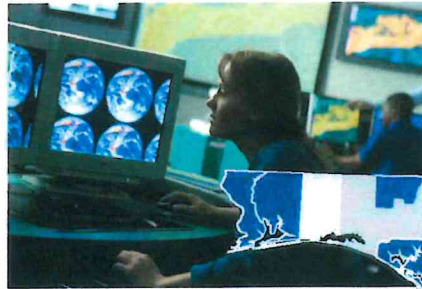
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Golden and Diamond Eagle Florida Scholarship Program

Embry-Riddle Aeronautical University is proud to announce the Diamond Eagle and Golden Eagle Scholarship program. These special scholarships are available for students in select Florida counties who choose to pursue 15 selected majors at the Daytona Beach campus. These generous scholarship awards are available to all students who meet university admissions standards.

The Golden Eagle Scholarship (\$19,100 annually) provides funding for more than half the yearly tuition. Students with outstanding standardized scores and GPAs can qualify for the Diamond Eagle Scholarships (\$27,200 annually). When combined with the Florida Academic Scholars awards (Bright Futures and the Florida Resident Access Grant), Diamond Eagle recipients realize full coverage of tuition. (Tuition does not include fees, insurance, room and board.)



ELIGIBLE UNDERGRADUATE DEGREE PROGRAMS:

Aerospace and Occupational Safety, Applied Meteorology, Business Administration, Aviation Business Administration, Communication, Interdisciplinary Studies, Human Factors Psychology, Engineering Physics, Computational Mathematics, Space Physics, Computer Engineering, Computer Science, Civil Engineering, Electrical Engineering, Software Engineering.

SCHOLARSHIP ELIGIBILITY:

Golden Eagle Scholars must meet minimum university and program specific admissions requirements. Diamond Eagle Scholars must meet minimum university and program specific admissions requirements and score greater than 1290 (math and critical reading components) on the SAT (or its ACT equivalent of 29 composite score) and possess greater than a 3.5 weighted CGPA. *Scholarship award amounts may be impacted should a student change degree programs.*

ELIGIBLE COUNTIES:

Alachua, Baker, Bay, Bradford, Brevard, Charlotte, Citrus, Clay, Collier, De Soto, Dixie, Duval, Escambia, Flagler, Gilchrist, Hardee, Hernando, Highlands, Hillsborough, Holmes, Indian River, Lake, Leon, Levy, Manatee, Marion, Nassau, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, Putnam, Saint Johns, Santa Rosa, Sarasota, Seminole, Sumter, Union, Volusia

