Engineering and Computer Science Majors

Computer Engineering

About
Computer engineers improve the underlying digital hardware, computing networks and production software systems that impact everyday life. The discipline aims to improve computer efficiency, and manage the hardware/software/energy costs of all types of computers, from portable embedded devices and miniature sensor nodes to supercomputers. The work involves mobile and embedded computing devices, sensor networks, reconfigurable logic, software engineering, and computer system design and analysis, and can be applied in a variety of sub-disciplines, including signal processing, cybersecurity, renewable power, biomedical sensing, computer architecture, microwave engineering and antenna design, and more. While computer engineers have less programming experience than computer science graduates, their understanding of hardware gives them an advantage in working with overall systems.

The electrical and computer engineering programs at UCF share a common set of core courses, such as mathematics, physics, chemistry, statistics, linear circuits, electronics. UCF also offers an accelerated BS to MS.

Coursework Includes
- Digital Systems
- Computer Organization
- Embedded Systems
- Computer Architecture
- Computer Communication Networks
- Engineering Analysis and Computation

See program requirements in the UCF catalog at http://catalog.ucf.edu

Where Computer Engineering Graduates Work
Computer engineers work for computer companies such as Texas Instruments and Intel, and also in industries that build or use computer-based systems, such as telecommunications, automotive, energy and aerospace.

Typical Starting Salary / Possible Job Titles
$61,000. Computer Hardware Engineer; Computer Software Engineer; Computer Design Engineer.

Related Student Organizations at UCF
Institute of Electrical and Electronics Engineers
Eta Kappa Nu (ECE Honor Society)
Women in EECS
Collegiate Cyber Defense Club (Hack@UCF)

Contact
Department of Electrical and Computer Engineering
407-823-3327
http://ece.ucf.edu

Related Minors
Computer Science; Mathematics;
Secure Computing and Networks;
Engineering Leadership;
Cyber Operations Certificate.
University of Central Florida
UCF's 13 colleges provide education and opportunities to 64,000 students from all 50 states and 152 countries. Located in Orlando, Florida, UCF is one of the nation's largest universities with 212 degree programs from which to choose. Students find community and camaraderie in more than 600 registered student organizations. See the UCF Viewbook at www.ucf.edu/admissions to learn more.

College of Engineering and Computer Science
With nearly 10,000 students, the college is among the nation’s top producers of engineers and computer scientists. Students receive rigorous instruction and graduate with solid technical skills.

During their academic career, students benefit from unique and innovative leadership and diversity-based support programs, such as the UCF Engineering Leadership & Innovation Institute (www.eli2.cecs.ucf.edu), and renowned STEM retention and mentoring programs described at www.stem.ucf.edu/stem-programs-at-ucf.

These programs are among the many reasons why the University of Central Florida was recognized along with Harvard, MIT, Stanford and Duke as one of the nation’s most innovative universities in U.S. News & World Report Best Colleges 2016 guide.

UCF Rankings
- Nation's #1 workforce supplier to the aerospace and defense industry (Aviation Week, 2015, 2016)
- Ranked #3 in nation, #28 in world, 2016 Association of Computing Machinery's International Collegiate Programming Competition.
- Ranked #1 among all state universities in Florida for performance measures that include graduation rates and graduates' employment and wages (Florida Board of Governors 2016)
- No. 1 choice of high school seniors in Florida and in the 12 states of the U.S. Southeast region (2016 Cappex College Considerations Report)