Computer engineering is a discipline that integrates training in computer science and electronics engineering to enable graduates to develop computer hardware and software. Computer engineers are involved in many hardware and software aspects of computing, from the design of individual microcontrollers, microprocessors, personal computers, and supercomputers, to circuit design. Computer engineers write software and firmware for embedded microcontrollers and design VLSI chips, sensors, mixed-signal circuit boards, and OS.

Computer engineering students at Clemson learn about circuits and electronics, digital logic, computer organization, and computer hardware and software. They also choose from a wide variety of technical electives in the areas of software, computer architecture, biomedical systems, communication systems, digital signal processing, intelligent systems, and electronics.

clemson.edu/ece
COMPUTER ENGINEERING

PROGRAM DETAILS:

Computer engineers work in many areas of specialization including information security, communications and wireless networks, compilers and operating systems, computational science and engineering, mobile computing and distributed systems, computer architecture and parallel processing.

LABS AND FACILITIES FOR HANDS-ON TRAINING

Computer Engineering labs are hands-on and lab space is primarily housed in Riggs Hall. Undergraduate students participating in Creative Inquiry or other research projects may also use the clean room and MicroFabrication facilities at the Clemson University Advance Materials Research Park.

CLUBS AND ORGANIZATIONS

- IEEE Student Branch – Institute of Electrical and Electronics Engineers
- HKN – Eta Kappa Nu (IEEE honor society)
- IEEE PES Student Chapter – Power Engineering Society
- CLUG – Clemson Linux Users and GNU
- SHPE – Society of Hispanic Prof. Engineers
- Amateur Radio Club
- TBP – Tau Beta Pi (honor society)
- Theta Tau – co-ed engineering fraternity
- WISE – Women in Science and Engineering
- NSBE – National Society of Black Engineers

GLOBAL ENGAGEMENT

While students are encouraged to take part in Clemson study abroad opportunities, it can be difficult to complete required engineering courses through study abroad opportunities. Instead, students often study abroad to meet general education requirements, or courses associated with a minor. Our academic advisors can help the student identify specific opportunities that match and can be fit within the ECE curriculum.

GRADUATE AND PROFESSIONAL SCHOOL OPPORTUNITIES

Roughly 32% of ECE students plan to attend graduate school. Many of these students continue their graduate education at Clemson, taking advantage of our BS-to-Grad program. Others attend a range of graduate programs such as Michigan State University, Georgia Institute of Technology, NC State, or University of Colorado Boulder.

UNDERGRADUATE RESEARCH

The Holcombe Department of Electrical and Computer Engineering has multiple research opportunities that undergraduate students can participate in, including:

- Senior Honors Thesis research projects
- Summer REU programs
- Multiple Creative Inquiry options

CO-OPS AND INTERNSHIPS

Roughly 20% of students in the Electrical and Computer Engineering department participate in a co-op and/or internship experience while at Clemson. Recent companies our students have worked with include IBM, Michelin, Boeing, Itron, GE, Duke Energy, BMW, Cisco, Texas Instruments, Intel, Exxon Mobil, and many others.

EMPLOYERS

Over 70% of our undergraduate students have multiple job offers in hand before graduation. Frequent and recent employers:

- Amazon
- IBM
- Michelin
- Facebook
- Google
- Boeing
- Itron
- GE
- Duke Energy
- BMW
- Cisco
- Texas Instruments
- Intel
- Exxon Mobil

More info at: clemson.edu/cecas/psu