

# Wireless Engineering

## WHAT IS WIRELESS ENGINEERING?

Wireless technology is everywhere — at home, work and on the road. We experience it in the form of cell phones, mobile computing, industrial or defense automation, emergency and security services, global positioning systems and medical monitors.

Developed with the help of wireless industry leaders, Auburn's wireless engineering program is the first of its kind in the nation. The program is an interdisciplinary effort between the Department of Electrical and Computer Engineering and the Department of Computer Science and Software Engineering to provide students a technical foundation to succeed in the rapidly growing wireless industry.

## NOTABLE

- 83 undergraduate students enrolled in fall 2016
- First program of its kind in the nation, established in 2002
- Interdisciplinary effort between the Department of Electrical and Computer Engineering and the Department of Computer Science and Software Engineering

## CURRICULUM

### Bachelor of Wireless Engineering

The curriculum emphasizes engineering theory and practice needed to design new generations of wireless systems, including hands-on laboratory experiments and oral and written communications skills. Freshmen and sophomores study basic sciences, mathematics and the humanities. Juniors and seniors are exposed to engineering fundamentals and engineering economics, as well as coursework specific to wireless engineering. Students choose their specialized track:

#### Wireless Hardware track

The wireless hardware track focuses on the design of wireless hardware such as integrated circuit chips, wireless communications devices and network switching equipment. The curriculum includes courses in circuit analysis, communications, digital systems, electronics, electromagnetism, and wireless communications and networks.

#### Wireless Software track

The wireless software track focuses on software development for embedded wireless systems, servers, clients and network processors. Coursework includes wireless communication theories, devices, circuits, systems, applications, standards, management and networks.

For information about academic programs and minors, visit

[www.eng.auburn.edu/programs](http://www.eng.auburn.edu/programs)

## RESEARCH, LABORATORIES AND CENTERS

Auburn's Wireless Engineering Research and Education Center (WEREC) is the focal point for cross-disciplinary wireless activities. Such interaction among disciplines provides an unmatched creative and educational environment for students interested in research and hands-on experience in the wide world of wireless.

## TEAMS AND ORGANIZATIONS

Auburn Engineering students have the opportunity to participate in a variety of activities beyond the classroom, gaining experience with teamwork and project management. Wireless engineering students are encouraged to participate in campus organizations, such as:

- Institute of Electrical and Electronics Engineers
- Institute of Electrical and Electronics Engineers Computer Society
- Association for Computing Machinery
- Tau Beta Pi honor society
- Cupola Engineering Ambassadors
- Engineering Student Council
- National Society of Black Engineers
- Society of Hispanic Engineers
- Society of Women Engineers
- Baja SAE
- Formula SAE

For more information, visit

[www.eng.auburn.edu/organizations](http://www.eng.auburn.edu/organizations)

## LIFE AFTER GRADUATION

Nationwide, there is a shortage of engineers who can design wireless systems and communication hardware and software. Potential employers include members of the wireless industry such as Agilent, AT&T and Verizon, as well as manufacturers of products that use wireless systems ranging from automobiles to airlines to advanced computers. The average starting salary of wireless engineering graduates is comparable to salaries of electrical, computer and software engineering graduates.

# SCHOLARSHIPS

The College of Engineering and the materials engineering program provide scholarship opportunities to students at every stage of their academic career. To be eligible for scholarships at Auburn University, all students must apply through the AUSOM system.

For information about engineering scholarships, visit  
[www.eng.auburn.edu/scholarships](http://www.eng.auburn.edu/scholarships)

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