

University of South Carolina

The University of South Carolina (UofSC) was established in 1801 and is a full-service, state-supported research university that includes the 358-acre Columbia campus and seven regional campuses with a total full-time student body population of more than 46,000 and 2,100 full-time faculty members. Located in the capital city of Columbia in the geographic center of the state, UofSC's main campus is part of a thriving metropolitan community of more than 450,000 inhabitants. UofSC offers a broad spectrum of educational opportunities with 14 colleges and schools that encompass 324 undergraduate and graduate degree-granting programs. UofSC confers 40% of all bachelors, professional, and graduate degrees awarded in public institutions in South Carolina.

UofSC Research Capacity

In fiscal year 2021, UofSC received more than \$300 million in extramural sponsored award funding, with more than half of which was for research, holding rank among the most prestigious Carnegie tier-one institutions of very high research activity. The University provides researchers with a full range of grant-related services through its College of Engineering and Computing Office of Research, Sponsored Awards Management, and Grants and Funds Management offices.

UofSC Libraries

Thomas Cooper, the University's main library, is centrally located on the Columbia campus. It maintains an extensive collection of engineering and computing-related resources, including books, journals, and indices. Access to online databases and full-text journals are available through the Thomas Cooper Library web page.

College of Engineering and Computing

The first Engineering classes were taught at the University of South Carolina in 1848. Engineering degrees have been offered at the University of South Carolina since 1894. The College of Engineering and Computing (CEC) was established in 1909 and has an enrollment of more than 3300 students, including 423 full-time graduate students and 2545 full-time undergraduates. The College currently employs 125 tenure, research and clinical track faculty members. Based at UofSC's main campus in Columbia, CEC is ranked by both U.S. News and World Report and the National Research Council. The UofSC College of Engineering and Computing's mission is to become a leader in technology innovation, engineering and computing education, and entrepreneurship.

CEC Degree Programs

The College of Engineering and Computing (CEC) offers programs of study at the doctoral, masters and bachelor's level. Doctoral degrees include Doctor of Philosophy (Ph.D.) in 7 disciplines. Master's degrees are offered in 11 disciplines. Eight baccalaureate programs include Biomedical Engineering, Chemical Engineering, Civil & Environmental Engineering, Computer Engineering, Computer Information Systems, Computer Science, Electrical Engineering, and Mechanical Engineering. The College of Engineering and Computing is fully accredited by ABET, INC. The Engineering Accreditation Commission of ABET has accredited the

biomedical engineering, chemical engineering, civil and environmental engineering, computer engineering, electrical engineering, and mechanical engineering programs. The computer information systems and computer science programs are accredited by the Computing Accreditation Commission of ABET.

CEC Computing Resources

The College of Engineering and Computing's Information Technology Services (ITS) is responsible for managing and maintaining the college's academic labs, active directory, services for faculty and staff, network security, LAN network and infrastructure, VPN servers and services, and the Computer Science and Engineering literacy labs. The College of Engineering and Computing ITS department administers more than 300 Windows machines capable of running all of the required applications needed to graduate. Students have free, 24/7 access to these labs. Therefore, a personal computer is NOT required to complete the programs in the College of Engineering and Computing.

CEC Computing Security and Capacity

The faculty in the Department of Computer Science and Engineering in the College of Engineering and Computing at the University of South Carolina (UofSC) is leading the way for information assurance research and education. Since 2000, the department has offered cyber security education and performed nationally recognized research. The CEC also hosts the Center for Information Assurance Engineering (CIAE). We are South Carolina's only higher education institution designated as a National Center of Academic Excellence in Information Assurance Education by the National Security Agency (NSA). UofSC is HIPAA compliant and secured for medical and security research data.

CEC Departments

The College of Engineering and Computing consists of five academic departments: Chemical Engineering, Civil and Environmental Engineering, Computer Science and Engineering, Electrical Engineering, and Mechanical Engineering. Specific areas of study include Aerospace Engineering, Biomedical Engineering, Chemical Engineering, Civil and Environmental Engineering, Computer Science and Engineering, Electrical Engineering, Engineering Management, Mechanical Engineering, Nuclear Engineering, Systems Design, and Engineering/Computing and Law.

Computer Science and Engineering

Graduates of our Computer Science and Engineering program can choose to focus their career in many different ways: entrepreneur, web applications, computer graphics, video games, enterprise computing, embedded systems, network administration, mobile applications, computer security, computer vision, computational biology, high performance (super) computing, scientific modeling, database systems, computer animations, wireless networks, artificial intelligence, and so on.

CEC Research Office & Resources

The College of Engineering and Computing's (CEC) Research Office supports faculty and departmental staff from start to finish in the sponsored research process. A dedicated pre-award staff assists with proposal development-related activities that promote and support efforts to increase grant funding to the College. The Research Enhancement & Development (RED) team aids faculty in writing proposals, finding collaborators, and managing funded projects. The RED team also coordinates peer reviews for key proposals and organizes brainstorming sessions with educational and topical experts to help PIs strengthen broader impacts. Post-award staff are dedicated to administration and financial compliance of sponsored funds. In fiscal year 2021, CEC principal investigators were awarded \$34 million in extramural funding.

Buildings & Labs

The Swearingen Engineering Center has been the home of the College of Engineering and Computing since 1987. With more than 500,000 square feet of teaching, research, and laboratory space, the Swearingen Center is one of the largest engineering facilities in the Southeast. Research at the College of Engineering and Computing is supplemented and supported through our centers, institutes, and research groups, which include several South Carolina SmartState Centers of Economic Excellence. These research centers coordinate and promote faculty and student research extending across and beyond the school.