

ENGINEERING AT COFC



ENGINEERING BRINGS THE COLLEGE of Charleston's

liberal arts and sciences tradition into the 21st century. As a lead source of talent for the local economy, the College is building relevant new programs to support our growing high-tech, manufacturing and engineering design industries. A heavy focus on engineering programs will expand the College's reach in the STEM fields and create opportunities for collaboration with business and community partners.

By establishing engineering at the College, we are capitalizing on our history as a leader in liberal arts education and looking to the future to produce a highly skilled workforce pipeline as an economic driver for the state of South Carolina.

GOAL

\$4,000,000

The College's engineering programs will bring the best of a liberal arts and sciences education together with the technical literacy to thrive in our increasingly technology—driven world.



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In response to the workforce needs of our industry partners, the College established its first engineering program, a Bachelor of Science in systems engineering. Systems engineers are in demand as flexible, versatile and creative problem solvers; these skills are best developed through a strong liberal arts and sciences curriculum.

The program is the first of its kind in South Carolina and instantly became one of the most popular STEM degree tracts at the College with 255 early applications for Fall 2020 admittance.

ENGINEERING FOUNDING DEAN

Goal: \$3,000,000 endowment to support salary and benefits package

An engineering founding dean will expand the College's offerings in electrical, mechanical, industrial, data, cyber and computer systems engineering in order to support the region's growth in the high-tech, manufacturing and engineering design sectors.

The engineering founding dean will:

- Prioritize and develop infrastructure to bring biomedical, mechanical, software and environmental geosciences engineering to the College
- Develop collaborations with universities
- Build partnerships with local industry to provide students with impactful internships, co-ops, mentoring and capstone experiences

ENGINEERING MAJORS LAB

Goal: \$500,000

Designing and equipping the perfect environment for students to experiment and explore is critical to successful engineering programs. Establishing strong business partnerships ensures that students practice real-world engineering aligned with industry needs.

The Rita Liddy Hollings Science Center has a designated engineering majors lab, which will be designed and outfitted with the input of Lowcountry business and community partners.

The lab will:

- Provide a space for engineering students to design, build and store capstone and other course projects
- Feature state-of-the-art equipment, instruments and software
- Teach students how to solve engineering problems that integrate industrial components including PLCs, sensors, relays, microprocessors, motors, manipulators, actuators and conveyor belts
- Give students access to the most current robotics technology, industry software subscriptions and simulation/CAD software licenses

ENGINEERING SCHOLARSHIPS

Goal: \$500,000

Expanding engineering degree programs at the College is an investment in the economic growth of the Lowcountry. Scholarships for engineering students will:

- Attract high-achieving STEM students who aim to pursue engineering degrees
- Recruit a diverse array of the best and brightest students
- Allow students to focus on their studies and alleviate the financial burden of working outside of the classroom
- Provide a highly skilled workforce pipeline for CofC industry partners in the high-growth automotive, aerospace and technology sectors

