



UNDERGRADUATE PROGRAM

BIOENGINEERING

2019 UNDERGRADUATE ENROLLMENT:

347

APPROX. TOTAL CREDIT HOURS*:

129

*Dependent on emphasis

Bioengineering involves using engineering skills to create integrated innovative technology to improve human health.

Grow human cells on aortic roots, study how replacement hips wear over time, and design implants using living and nonliving materials. These remarkable breakthroughs in technology are just a few examples of the amazing research going on in Clemson's bioengineering labs. Through your classes and labs,

you'll gain an extensive understanding of biology, biochemistry and physiology and will graduate with the capability to apply advanced mathematics to solve the ever-increasing problems that require engineering to mix with biology.

Every day, you and your professors will work side-by-side in the lab on research into how engineers — in collaboration with physicians — can support the human body to prevent and solve medical problems.



BIOENGINEERING AT CLEMSON

Clemson bioengineering students study and work at the interface of life sciences and engineering to develop innovative solutions to improve human health from the local to the global scale.

Through applied training in laboratory courses; creative inquiry and mentored research; and senior design students learn to work collaboratively in interdisciplinary teams to bring technology from bench to the clinic.

clemson.edu/bioengineering

BIOENGINEERING

PROGRAM DETAILS:

With a bioengineering bachelor's degree, Clemson alumni can find jobs in the medical device and pharmaceutical industries (companies like Medtronic, Stryker, Gore, etc), in hospitals and medical centers, in academia, and in government regulatory agencies such as NIH, FDA, and others.

LABS AND FACILITIES

The learning and research spaces associated with the bioengineering undergraduate program include:

- Rhodes Engineering Research Center and Rhodes Annex
- Clemson University Bioengineering Innovation Campus (CUBEInC)
- MUSC Clinical Research Facility (Charleston)

CLUBS AND ORGANIZATIONS

Bioengineering student clubs and organizations include:

- Clemson Bioengineering Society
- Society for Biomaterials
- Biomedical Engineering Society

GLOBAL ENGAGEMENT

Bioengineering-specific study abroad opportunities include summer programs in:

- Pamplona, Spain (lecture-based)
- Tokyo, Japan (research-based)
- Osaka, Japan (research-based)

GRADUATE AND PROFESSIONAL SCHOOL

Bioengineering students attend graduate school for MS, M.Eng., and PhD degrees as well as law school and business school (MBA). Approximately 53% of BioE students attend graduate school (24% M.Eng.) and 16% attend medical or other professional school following their bachelor's degree.

CLEMSON



UNDERGRADUATE RESEARCH

Working with graduate students and professors, students can get involved in Creative Inquiry courses and research labs. Undergraduate researchers are involved in such areas as:

- Cardiovascular Disease
- Regenerative Medicine
- Orthopedic Design
- Computational Models

INTERNSHIPS AND CO-OPS

Students co-op and intern with a wide range of companies varying in size. Some of these include:

- Johnson and Johnson
- Medtronic
- Miliken Healthcare
- Pfizer
- Poly-Med, Inc.

EMPLOYERS

Approximately 20% of BS graduates go directly to industry, while 24% first complete the Master's of Engineering degree. Some of the employers of our students include:

- Johnson and Johnson
- Medtronic
- Miliken Healthcare
- Poly-Med, Inc.
- Abbot



Department of
BIOENGINEERING
College of Engineering Computing
and Applied Sciences

More info at: clemson.edu/cecas/psu