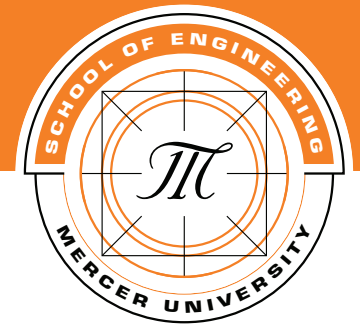


MERCER UNIVERSITY SCHOOL OF ENGINEERING



MASTER'S DEGREE IN BIOMEDICAL ENGINEERING

Biomedical Engineering: Where Engineering, Medicine and Design Meet

Dramatic advances in engineering and medical science have resulted in new opportunities for those trained in the application of both: biomedical engineers. These engineers work on the cutting edge of applying engineering methods to problems in medicine and the life sciences and are playing a vital role in these rapid and unparalleled advances. Whether you have an engineering degree in another field or have an undergraduate degree in biomedical engineering, Mercer University's Master of Science in Engineering in biomedical engineering is the opportunity you need to advance your career in this rewarding field.

Led by an experienced and committed faculty, Mercer's graduate biomedical engineering program emphasizes three major areas: biomedical instrumentation, computational fluid dynamics and biomechanics. The program prepares you for advanced study or for positions in a variety of related fields ranging from the practice of medicine and traditional engineering, to the design and manufacture of bioinstrumentation devices, to the administration of health care services and management of hospital components, to the computer monitoring and simulation of medically related systems.

An Advanced Degree for the Practicing Professional:

- Attend evening courses taught once a week
- Learn from a diverse and industry-experienced faculty in face-to-face class settings
- Benefit from small classes and a high level of interaction between students and faculty

- Study in the program's major emphasis areas: biomedical instrumentation, computational fluid dynamics or biomechanics

Benefits of the programs

- Expand your professional knowledge through advanced coursework
- Tailor your degree to your company's needs and your professional goals
- Learn management skills and project leadership and position yourself for leadership
- Prepare for a new career in biomedical engineering or prepare for advanced study in a doctoral program

Take courses from a range of advanced biomedical engineering topics, including:

- Advanced Bioinstrumentation
- Advanced Biomaterials/Mechanics
- Health Care Delivery Systems
- Clinical Information Systems
- Biomedical Applications of Digital Signal Processing
- Advanced Cardiac Mechanics
- Neurophysiology and the Cardiovascular System
- Pharmacokinetics and Drug Delivery Systems
- Radio Technology and Radiological Safety
- Kidney Function and Kidney Dialysis

These flexible degrees offer two pathways to your master's degree:

1. Explore advanced biomedical engineering topics with the



Fluid dynamics model of a cerebral aneurysm

all-coursework option (30 credit hours).

2. Contribute to the biomedical engineering field through graduate research via a faculty-directed thesis (24 credits coursework and 6 credits thesis).

About the program:

The program is open to all qualified engineers, regardless of undergraduate engineering major. Students who do not have an adequate background in medicine or biology may be required to take additional courses. The degree requires a minimum of 30 credit hours with a minimum of 18 hours in major.

Admission Requirements for master's programs:

- Submit a completed graduate application along with application fee
- For the Master of Science in Engineering, applicants must possess a bachelor's degree from an engineering school

accredited by the Engineering Accreditation Commission of ABET Inc.

- Have earned an undergraduate GPA of 3.0 overall – transcripts must be submitted in order to be considered
- Submit two or more letters of recommendation from former faculty members or work supervisors

For more information, or for an application packet:

Mercer University School of Engineering
1400 Coleman Avenue • Macon, GA 31207
(800) MERCERU, ext. 2347 or (478) 301-2347

Graduate Program web site:

<http://engineering.mercer.edu/academics/gradpgms.htm>

Biomedical Engineering web site:

http://engineering.mercer.edu/graduate_pgms/bme/index.htm

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