

BIOMEDICAL ENGINEERING (GRADUATE GROUP)

College of Engineering

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Group Office

2306B Genome & Biomedical Sciences Facility; 530-752-2611; Biomedical Engineering Graduate Group (<https://bmegg.ucdavis.edu/>); Faculty (<https://bmegg.ucdavis.edu/faculty/>)

Mission

The mission of the Biomedical Engineering Graduate Group (BMEGG) is to provide the highest standard of student education, research, and service in the area of biomedical engineering. The multidisciplinary character of biomedical engineering and operation of the program as a graduate group offers unique opportunities to fulfill this mission. The educational mission is served by capitalizing on the expertise of faculty from diverse disciplines to develop a curriculum focusing on the application of engineering principles to medicine and biology. The research mission of the program is to encourage and support collaborative research designed to produce new knowledge about fundamental mechanisms in the life sciences and to bond basic and clinical research to provide new knowledge for improving health care by way of device development and innovative medical technology.

Graduate Study

The program of study in biomedical engineering leads to an MS and/or a PhD and is intended to prepare students for professional work in the effective integration of engineering with the biological and medical sciences, including the modeling of biological systems and the design of devices and procedures useful for human and veterinary medicine. The program is designed to provide sufficient flexibility to meet both the needs and interests of individual students and the changes of emphasis in this new and rapidly growing field. While assuring competence in engineering and biological sciences, the program is intended to meet the conflicting demands for flexibility, breadth and depth of training, and limitation of training time. The program is designed to give each student adequate exposure to analysis, design, experimentation, and communication.

Preparation

The BMEGG curriculum requires strong competence in mathematics, engineering, and biology for successful completion of study. Prior course work in these areas is emphasized in the evaluation of applications, though some undergraduate training can be acquired after admission to the BMEGG. See Academic Preparation (<https://bmegg.ucdavis.edu/academic-preparation/>) for additional information.

Advising

See BMEGG Advising & Administration (<https://bmegg.ucdavis.edu/advising-administration/>).

- Biomedical Engineering, Master of Science (<https://catalog.ucdavis.edu/departments-programs-degrees/biomedical-engineering-graduate-group/biomedical-engineering-ms/>)
- Biomedical Engineering, Doctor of Philosophy (<https://catalog.ucdavis.edu/departments-programs-degrees/biomedical-engineering-graduate-group/biomedical-engineering-phd/>)