GRADUATE PROGRAM IN

BIOLOGICAL ENGINEERING

Program of Study

The Master of Science in Biological Engineering prepares students to conduct research involving the application of engineering to biological systems. Examples of research projects are sensors to detect specific biological molecules or pathogens in food or water, understanding cell membranes in terms of signaling and transport of molecules, imaging of cells or proteins, conformation of biological molecules at membrane surfaces as well as environmental risk assessment modeling. Alliances with several governmental agencies and other organizations, such as the Institute of Molecular Biophysics, the Jackson Laboratory and Maine Medical Center Research Institute, increase research opportunities related to genetics and biomedical issues in engineering. Cooperation with the Laboratory for Surface Science and Technology gives access to tools related to surface analysis.

Financial Aid

Graduate Research Assistantships are available on a competitive basis from externally funded research projects.

Research Facilities

Standard equipment for cell growth and characterization, near IR, confocal microscope, mechanical materials testing for biological materials and other tools are available. Specialized equipment is also available related to individual projects.

Applying

Applications for entry into the program for either the fall or spring semesters must be received at least three months prior to the start of the semester. For fall semester, it is recommended that applications be received by March of that year. Applications are available on line at The Graduate School website.

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