## **BIOMEDICAL ENGINEERING**

## **Learning Outcomes**

## Master of Science (M.S.)

- Graduates will be able to demonstrate understanding of advanced core principles and methods from selected sub-fields of Biomedical engineering at a depth consistent with their course of study.
- Graduates will be able to apply their knowledge of selected subfields of Biomedical engineering to formulate and solve engineering problems.
- Graduates will be able to analyze and synthesize knowledge within the field of Biomedical engineering to extend existing knowledge through a research experience and thesis.
- Graduates will be able to demonstrate proficiency in oral and written communication appropriate to their discipline.
- Graduates will be able to demonstrate an understanding of, and a commitment to, the standards for scholarship and research integrity within Biomedical Engineering.

## **Doctor of Philosophy (Ph.D.)**

- Graduates will be able to demonstrate an understanding of advanced core principles and methods as well as modern research findings from selected sub-fields of Biomedical engineering at a depth appropriate for a Ph.D. candidate.
- Graduates will be able to apply their knowledge of selected sub-fields of Biomedical engineering in formulating and executing a research plan.
- Graduates will be able to demonstrate the ability to analyze and synthesize appropriate literature, to critically review their work in the context of the literature, and to formulate and defend conclusions based on their research that represent new scholarly contributions.
- Graduates will be able to demonstrate high levels of proficiency in oral and written communication.
- Graduates will be able to demonstrate an understanding of, and a commitment to, the standards for scholarship, professional practice, and research integrity.