

## BIOMEDICAL ENGINEERING

### MISSION

*The mission of the Biomedical Engineering Department is to:*

- Prepare students for rewarding careers in the diverse fields of biomedical engineering and the health care industry
- Create new knowledge at the interface between engineering and biomedical science
- Create enabling technologies for the improvement of human health and health care
- Pursue continued education in biomedical research or medicine.

## BIOMEDICAL ENGINEERING

### PROGRAM EDUCATIONAL OBJECTIVES

*The program educational objectives of the BME program at Sagesse University are to:*

1. Advance the students in their careers through innovation, critical thinking, leadership, life-long learning, proactivity and integrity.
2. Prepare students to succeed in post-graduate studies and industry employment in biomedical engineering or related fields.
3. Contribute to the biomedical field through the responsible design of devices, systems, processes, and policies that improve human health.
4. Pursue a wide range of career options, including those in industry, academia, and medicine.
5. Become active leaders in their profession, creating ethical and socially beneficial solutions to human health problems.

## BIOMEDICAL ENGINEERING

### PROGRAM OUTCOMES

*By the time biomedical engineering students graduate, they will attain:*

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.