

# Professional Electives

3000-5000 level engineering or life sciences course with clear biomedical engineering application OR BME 4900 OR departmental 4900 with biomedical engineering topic OR 2000+-level life sciences laboratory course (If a 2000-level course is chosen here, the student will need to meet the required 6 cr. of 3000+ courses by substitution of a higher-level course for the other requirements or by taking an additional course.), OR 3000-5000 level BME courses. Students need to pick from this list or use other courses, if approved by the Biomedical Engineering curriculum committee, to satisfy this requirement.

## Labs and Methods

[BIOL 2120L](#): Principles of Biology Laboratory II

[BIOL 2560L](#): Fundamentals of Human Physiology Laboratory

[BIOL 3350L](#): Principles of Human and Other Animal Physiology Laboratory

[BMS 5020](#): Methods in Biomedical Sciences

## Homeostasis

[FSHN 3650](#): Obesity and Health

[FSHN 5890](#): Systems Neuroscience: Brain, Behavior, and Nutrition-Related Integrative Physiology

[KIN 3550](#): Biomechanics

[KIN 3580](#): Exercise Physiology

[KIN 3630](#): Basic Electrocardiography

[KIN 4800](#): Functional Anatomy

## Therapeutic Action

[BMS 4390](#): Principles of Pharmacology

## Enabling Biology

[BBMB 4050](#): Biochemistry II

[BIOL 3130 / GEN 3130](#): Principles of Genetics

[BIOL 3140](#): Principles of Molecular Cell Biology

[BIOL 3500](#): Comprehensive Human Anatomy

[BIOL 4360](#): Neurobiology

[BMS 4470](#): Introduction to Human Gross Anatomy

## Disease Bases

[BIOL 3280](#): Molecular and Cellular Biology of Human Diseases

[TOX 4010](#): Principles of Toxicology

[VPTH 3530 / BIOL 3530 / MICRO 3530](#):  
Introductory Parasitology

[VPTH 4020 / BIOL 4020](#): Introduction to Pathology

[VMPM 5010](#): Basic Principles of Microbiology