GRADUATE PROGRAM COURSE LIST

According to the Graduate College requirement, only courses that carry graduate credit are counted toward graduate study programs. When enrolling in courses cross-listed for both undergraduate and graduate sections, make sure to enroll in the graduate section. If a course no longer offers graduate credit, please do not enroll, and contact the departmental program assistant for help. The lists here only indicate the courses that are allowed to be counted toward each course category for the graduate programs of study. They do not necessarily indicate that any combination of them is a valid graduate program of study. Check out the degree requirements at both Graduate College and the Stephenson School of Biomedical Engineering.

Biomedical Engineering Electives (BME Electives):

- BME/CH E 5243 Biochemical Engineering (S)
- BME 5233 Biomaterials (S)***
- BME/AME 5213 Biomechanics I (F)
- BME/AME 5970-004 Introduction to Medical Device Design (S)***
- BME 5413 Nanomedicine (S)
- BME/CH E 5373 Tissue Engineering (F)
- BME/AME/CH E 5293 Transport in Biological Systems (F)
- ECE 4823 Engineering Principles of the Human Body (S)
- ECE 5843 Medical Imaging Systems (S)
- ECE 6813 Advanced Topics in Biomedical Engineering (S)
- BME/ECE 5853 Biomedical Signals and Systems (S)
- ECE 5973 Medical Imaging Informatics (F)
- BME/ECE 6213 Optical Information Processing (S)
- BME 5533 Neural Engineering (F)
- BME 5283 Immuno-Engineering (S)
- BME 5113 Special Topics in Cancer (S)

Life Science Courses:

- CHEM G3653 Introduction to Biochemistry (F)
- CHEM G5853 Principles of Biochemistry II (S)
- CHEM 5291 Seminar – Biochemistry (F, S)
- CHEM 5260 Special Topics in Biochemistry I or II***
- HES G5823 Exercise Physiology (F)
- HES G5833 Advanced Exercise Physiology Lab (S)
- HES G5863 Physiology of Aging (F)
- MBIO G4833 Basic Immunology (S)
- MBIO G5620 Investigations in Microbiology (F, S, SU)
- MBIO G5843 Introduction to Molecular Biology (F, S)
- MBIO G5971 Seminar in Microbiology (F, S)
- BIOL G3101 Principles of Physiology Lab (F, S)
- BIOL G3103 Principles of Physiology (F, S)
- BIOL G3333 Genetics (F, S)
- BIOL G3342 Genetics Lab (F)
- BIOL G4913 Quantitative Biology (F)
- BIOL G5364 Transmission Electron Microscopy (F)
- BIOL G5374 Scanning Electron Microscopy***
- MBIO 5620 Water Microbiology (F, S, SU)
- BIOL 5871 Current Topics in Neurobiology (F, S)
- BIOL 5893 Behavioral Neurobiology (F)
- PSY 4253 Perceptual and Cognitive Neuroscience***
- PSY 4920 Clinical Psychology (F, S, SU)

Additional Science, Engineering, and Math Electives (STEM Electives):

- **Open list.** However, the courses in this category should **NOT** be those in the lists for BME electives and Life Sciences electives.

**KEY:**
(S): Spring  
(SU): Summer  
(F): Fall  
***: infrequently  

Courses in other engineering disciplines and outside of engineering will require a permission override from the course department. Contact the departmental program assistant for an override.