Biomolecular and Biomaterial Design

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Guide for class selection: The fields of biomolecular and biomaterial design rest on foundational biochemical/biophysical principles. Students are encouraged to choose restricted electives that provide them with strong background in these areas, and to incorporate advanced classes that provide exposure to design in either a molecular or a materials context.

Restricted Electives

5.08 Biological Chemistry II – same as 7.08 (U)
   Prereq: 5.12; 5.07 or 7.05

8.241 Introduction to Biological Physics (U)
   Prereq: Physics II (GIR); 8.044, 5.60, or 20.111

20.310 Molecular, Cellular, and Tissue Biomechanics (U)
   Prereq: 2.370 or 2.772; 18.03 or 3.016; Biology (GIR)

20.361 Molecular and Engineering Aspects of Biotechnology (U)
   Prereq: 2.005, 3.012, 5.60, 20.111; 7.06; or permission of instructor

20.363 Biomaterials Science and Engineering (U)
   Prereq: 3.034, 20.110, or permission of instructor

20.345 Bioinstrumentation Project Lab (U)
   Prereq: Biology (GIR), and 2.004 or 6.003; or 20.309; or permission of instructor

3.032 Mechanical Behavior of Materials (U)
   Prereq: Physics I (GIR); 3.016 or 18.03

3.034 Organic and Biomaterials Chemistry (U)
   Prereq: 3.012

20.415 Physical Biology (G)
   Prereq: permission of instructor

Electives

20.305 Principles of Synthetic Biology (U)
   Prereq: None