Biocomputational Engineering

Biocomputational Engineering is an undergraduate academic program that is at the nexus of the biological sciences, engineering, and computer science. The curriculum begins with classes in the mathematics and life & physical sciences, as well as computer programming and core engineering principles, which form the foundation for our biocomputations courses that cover a range of subjects, from bioinformatics and machine learning to biophysical models and biomedical signals. In our capstone courses, the students integrate and apply what they have learned in the earlier portion of the curriculum in a hands-on, collaborative setting. Our faculty are drawn from Bioengineering, Computer Science and Engineering, Biological Sciences, Physics, and Industrial and Systems Engineering, which will expose the students in this program to a rich, diverse range of expertise in this exciting discipline.

Opportunities for academic research and employment in the field of Biocomputational Engineering are growing dramatically. People with experience in areas such bioinformatics and data analysis are currently in high demand at pharmaceutical, biotechnology, and software companies.

For detailed information about our B.S. in Biocomputational Engineering program, including academic requirements and a typical four-year course plan, please go to the catalog listing for Bioengineering.