Biotechnology and pharmaceutical organizations are increasingly making bioinformatics an integral part of their research processes. Science and other trade publications have identified computational biology as a job-growth field as these industries seek to make use of vast amounts of genomic data and produce more complex and accurate models of biological processes. The mathematical, statistical, and computational methods of bioinformatics promise to produce more comprehensive explanatory models and to improve global health technologies.

The Master of Science in Bioinformatics offers students comprehensive, multidisciplinary education in bioinformatics and computational biology, including topics such as systems biology, genomics, proteomics, and statistical genetics. Graduates are equipped to engage in productive bioinformatic research and to effectively communicate research projects and findings to multidisciplinary project teams. Bioinformatics’ multidisciplinary nature attracts students with backgrounds in biomedical research, life science, information technology, engineering, and statistical modeling. Learn from our experienced faculty in order to understand the research problems that define the search for new drugs and exploit cutting-edge information technology to analyze complex data sets.

GRADUATES ARE PREPARED TO:

- Apply a variety of skills to the processing, storage, analysis and modeling of many types of biological data.
- Provide valuable insights into the understanding of complex biological systems and their quantitative data.
- Positively impact research projects in the corporate and academic sectors.
- Effectively communicate and present bioinformatic analysis to multidisciplinary project teams.
WHY BRANDEIS GPS
Brandeis University’s Division of Graduate Professional Studies focuses on delivering online, applied, Master of Science degrees to working professionals looking to build skills in flourishing, global industries. We pride ourselves on offering the right balance of practice and theory, with an emphasis on practicality.

- Learn online, quality unsurpassed
- Engage industry leaders in small class sizes
- Earn a master’s in innovative and applied programs
- Entrepreneurial programs designed with you in mind
- Individualized attention
- Apply or just take a course
- Collaborate with diverse groups of professionals

BIOINFORMATICS STUDENTS
- The median age for the program’s students is 35.
- The program population is comprised of 49% male and 51% female.
- Number of states our students represent: 4.
- Most represented states: Massachusetts, Florida, Maine, Rhode Island, and Germany.
- 69 students have graduated from this program since it launched in 2002.
- 24 students are currently working towards this degree.

OUR STUDENTS WORK OR HAVE WORKED AT PRESTIGIOUS ORGANIZATIONS SUCH AS:
- Partners Healthcare
- AstraZeneca
- Novartis
- Bayer Corporation
- Biogen Idec
- Millennium Pharmaceuticals
- ImmunoGen, Inc.

REQUERED COURSES
- Structural Bioinformatics
- Biological Sequence Analysis
- Molecular Modeling and Cheminformatics
- R for Biomedical Informatics
- Biological Data Mining and Modeling
- Statistical Genetics

SAMPLE ELECTIVES (SELECT 6)
- Genomics and Genetics
- Proteomics: Analytical and Computational Principles
- Computational Systems Biology
- Biological Database Systems
- Whole-genome Gene Expression Analysis
- Java Programming for Bioinformatics
- Organizational Leadership and Decision Making
- Software Development Methodologies
- Database Management

PROGRAM PRE-REQUIREMENTS (MAY BE REQUIRED)
- Probability and Statistics
- Molecular, Cell and Developmental Biology
- Introduction to Bioinformatics Scripting and Programming

Connect with an Enrollment Advisor today to discuss your interest or make a plan to apply. Call us at 781-736-3447, toll free 800-618-4681 or apply online.