The Program

The Biomedical Informatics Master of Science (BMI MS) program at NYU Sackler Institute of Biomedical Sciences is a one-year curriculum designed to teach practical skills in basic science, translational science and medical research with the goal of developing professionals who can readily solve modern informatics challenges.

Topics of the Master’s Program

- molecular signatures and personalized medicine
- computational causal discovery methods, biomedical information retrieval and scientometrics
- high-throughput assay informatics (next-generation sequencing, proteomics, metabolomics and image analysis), modeling and simulation of biological systems

This master’s program targets individuals interested in pursuing careers in academia, pharmaceutical and biotech companies, as well as professionals in medical centers, hospitals, insurance and consulting companies.

The BMI MS takes advantage of a real-life scientific environment consisting of a nexus of laboratories, institutes, centers, and departments at NYU Langone Medical Center, NYU School of Medicine, and NYU’s Washington Square campus. Students of the program experience firsthand the practical application of real data analysis from biomedical research, biotechnology and healthcare projects.

Courses

All classes are offered in the evening.

Summer

Introductory Classes (select 4 credits)
- Programming (2 credits)
- Biology (2 credits)
- Medicine (2 credits)

Fall

Three Core Classes, One Elective
- Methods (3 credits)
- Topics in Bioinformatics (3 credits)
- Medical Informatics (3 credits)
- Seminar in Biomedical Informatics (0 credits)
- Elective

Spring

One Core Class, One Elective
- Machine Learning (3 credits)
- Seminar in Biomedical Informatics (0 credits)
- Elective

Summer

Practicum in Biomedical Informatics (6-12 credits)
All students must complete at least one practicum in the areas of:
- Research
- Industry
- Consulting

Admission Requirements

Individuals with a bachelor’s degree and knowledge in at least one of the following areas should apply:
- basic sciences (e.g., biology, physics, genetics)
- quantitative sciences (e.g., computer science, mathematics, statistics)
- health-related fields (e.g., medicine, dentistry, public health, clinical genetics, clinical psychiatry)