



**BIOINFORMATICS** Master of Science

## **ADVANCE TO THE FOREFRONT OF BIOTECH AND** DATA SCIENCE



With extraordinary breakthroughs that have led to new methods of interpreting and treating disease utilizing massive amounts of data, there is a rapidly growing demand for professionals with expertise in molecular biology and big data analysis. In this dynamic master of science program, you will hone your skills in a field that promotes advances in cancer management, vaccine design, agriculture, energy, and other important areas. Learn to employ genomic data and next-generation sequence analysis tools to solve critical biotechnology and pharmaceutical challenges.

- Flexible learning platform featuring live and interactive content
- Mentorship support program available
- 100% online courses

#### **CONCENTRATIONS**

Specialize in laboratory science or translational science

30 CREDITS

**Required to** complete the degree

\$170K Average U.S. salary for a bioinformatics career

# WHY ONLINE EDUCATION?

Flexibility



**Receive an NYU Tandon Engineering** degree with the flexibility to balance your academic journey with your work schedule

## Networking & Support

**Benefit from connections with industry** experts and leaders, mentorship programs, professional coaching, and more

Timely

### Knowledge

**Our courses are constantly** evolving to include information from cutting-edge fields



# **CURRICULUM OUTLINE**

#### Required Courses (18 Credits)

- Algorithms and Data Structures for Bioinformatics
- Problem Solving for Bioinformatics
- Biology and Biotechnology
- Statistics and Mathematics for Bioinformatics
- Applied Biostatistics for Bioinformatics
- Machine Learning and Data

#### for Bioinformatics

### Concentration (6 Credits)

- Laboratory Science
  - Proteomics for Bioinformatics
  - Next Generation
    Sequence Analysis
    for Bioinformatics

### Electives (6 Credits)

- Transcriptomics
- Special Topics in Informatics in Chemical and Biological Sciences

The reason I applied to NYU was because I was so fascinated with where biology was moving, and that's big data analysis. We learned Perl and Python, and I am now able to create my

Science for Bioinformatics

- Translational Science
  - Translational Genomics and Computational Biology
  - Population Genetics and Evolutionary Biology for Bioinformatics

own scripts, to go through the genomes or whatever I happen to be looking at myself. The bioinformatics program has set me up for where I am now."

#### **Carmen Wickware**

Bioinformatics, Master of Science Online, Graduate Research Assistant at Purdue University, specializing in applied microbiology

# ENGAGE IN UNPARALLELED NETWORKING OPPORTUNITIES

NYU Tandon collaborates with top industry partners to benefit you as a student in bioinformatics. As you become immersed in our award-winning online program and purse your graduate degree, you will be connected with like-minded professionals from around the world. Our partners include:



### Goldman Sachs













#### JPMORGAN CHASE & CO.

# HOW TO APPLY

To be eligible for consideration to any graduate program at NYU Tandon, you must hold a bachelor's degree from a regionally accredited U.S. institution or its international equivalent. Review the application requirements for the Bioinformatics, M.S. and follow all application deadlines.

#### **ADMISSION REQUIREMENTS**

Create an account to start a new application. In addition to your completed application,

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Image: NoruTandon School<br/>GF EngineEringDigital Learningtel: 646.997.3623 or 877.503.7659c: tandon.online@nyu.edu