BIOTECHNOLOGY AND ENTREPRENEURSHIP (MS)

Chemical and Biomolecular Engineering Department (https://engineering.nyu.edu/academics/departments/chemical-and-biomolecular-engineering/)

NYSED: 31131 **HEGIS:** 0499.00 **CIP:** 26.1201

Program Description

Analysts predict biotechnology will be one of the most important applied sciences in the 21st century. Every day seems to welcome yet another important advancement in the field and, with each development, a chance to grow a business. Individuals who want take advantage of those advancements are invited to apply to the Tandon School of Engineering's MS in Biotechnology and Entrepreneurship program. We arm students with the skills to develop innovative products, which may then be used to launch high-tech businesses. Students may also participate in internships at pharmaceutical companies or biotech start-ups.

Admissions

To apply for admission to any Tandon graduate program, please contact the Office of Graduate Admissions (https://engineering.nyu.edu/admissions/graduate/).

Program Requirements

The program requires the completion of 30 credits, comprised of the following:

Course	Title	Credits
Core Courses		
BT-GY 6013	Biotechnology and the Pharmaceutical Industry	3
BT-GY 6023	Biotechnology and Health Care	3
BT-GY 6033	Biosensors and Biochips	3
BT-GY 6043	Biocatalysis in Industry	3
MG-GY 7703	Entrepreneurship	3
Biotechnology or Management Elective		
Choose 3 credits of courses from either the Biotechnology Electives or Management Electives lists below. [1]		3
Management Electives		
Choose 9 credits of courses from the Management Electives list below. [1]		9
Capstone		
BTE-GY 9513	Project in Biotechnology and Entrepreneurship	3
Total Credits		**30**

[1] Subject to adviser's approval, students may take elective courses at other schools of NYU (up to 9 credits). For example, students may select courses at the NYU Stern School of Business (https://www.stern.nyu.edu/). However, courses cannot be selected from the School of Professional Studies.

Biotechnology Electives

Course	Title	Credits
Biotechnology Elective Options		
BT-GY 6053	Introduction to Neuroscience for Biotechnologists	3
BT-GY 6063	Immunology: Concepts, Mechanisms and Applications in Biotechnology	3
BT-GY 6093	Biomedical Materials & Devices for Human Body Repair	3
BT-GY 7013	Special Topics in Biotechnology	3
BT-GY 7043	Computer-Aided Protein and Drug Design	3
BT-GY 9433	Protein Engineering	3
BTE-GY 950X	Project in Biotechnology and Entrepreneurship	0.5-3

Management Electives

Course	Title	Credits
Management Electives		
MG-GY 6013	Organizational Behavior	3
MG-GY 6023	Economics and Strategy	3
MG-GY 6033	Financial Analysis for Tech Managers	3
MG-GY 6073	Marketing	3
MG-GY 6103	Management Science	3
MG-GY 6123	Human Resource Management	3
MG-GY 6303	Operations Management	3
MG-GY 7953	Global Innovation	3
MG-GY 8203	Project Management	3
MG-GY 8273		3
MG-GY 8643	New Product Development	3
MG-GY 8673	Technology Strategy	3

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
BT-GY 6023	Biotechnology and Health Care (core)	3
BT-GY 6033	Biosensors and Biochips (core)	3
MG-GY 7703	Entrepreneurship (core)	3
	Credits	**9**
2nd Semester/Term		
BT-GY 6013	Biotechnology and the Pharmaceutical Industry (core)	3
BT-GY 6043	Biocatalysis in Industry (core)	3
Management Elective		3
	Credits	**9**
3rd Semester/Term		
Management Elective		3
Management Elective		3
Biotechnology Elective (or Management Elective)		3
	Credits	**9**
4th Semester/Term		
BTE-GY 9513	Project in Biotechnology and Entrepreneurship (capstone)	3
	Credits	**3**
	Total Credits	**30**

Learning Outcomes

Upon successful completion of the program, graduates will:

1. Demonstrate fundamental knowledge of main Biotechnology subject areas, including the underpinning science.
2. Have developed a clear understanding of how the main Biotech concepts are applied in practice.
3. Have acquired skills and experience necessary to successfully enter the workforce.

Policies

Program Policies

GPA and Grade Requirements

To meet graduation requirements, students must attain an overall (cumulative) GPA of 3.0 in all courses taken and earn a grade of B- or higher in each of the core courses.

NYU Policies

University-wide policies can be found on the New York University Policy pages (https://bulletins.nyu.edu/nyu/policies/).

Tandon Policies

Additional academic policies can be found on the Tandon academic policy page (https://bulletins.nyu.edu/graduate/engineering/academic-policies/).