CONSTRUCTION MANAGEMENT (MS)

Civil and Urban Engineering Department (https://engineering.nyu.edu/academics/departments/civil-and-urban-engineering/)

NYSED: 28333 **HEGIS:** 0599.00 **CIP:** 14.3301

Program Description

Today's construction professionals face a highly competitive global engineering and construction environment that requires a fundamental understanding of management, technology, and finance, as well as business and legal principles. Talented managers know how to avoid costly delays, how to maximize existing budgets, and how to control a project's scope, among other valuable skills. Our program helps students acquire that expertise and prepares them to be leaders in the construction industry.

The program educational objectives (PEO) of the Master of Science in Construction Management are for students to learn management and leadership practices, how to apply innovative organizational, technological, planning, and financial tools to construction projects and programs, and the importance of effective communication with all construction industry players.

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 with a cumulative grade point average (GPA) of 3.0 or higher. The lists below are subject to change as courses are added to or deleted from the program.

Course	Title	Credits
Major Requirements		
Select a minimum of 18 credits (six courses) of the following:		18
CE-GY 7963	Selected Topics in Construction I	
CE-GY 8243	Construction Modeling Techniques	
CE-GY 8253	Project Management for Construction	
CE-GY 8263	Construction Cost Estimating	
CE-GY 8273	Contracts and Specifications	
CE-GY 8283	Risk Analysis	
CE-GY 8293	Construction Operations Analysis	
CE-GY 8313	Engineering for Construction I: Methods and Technologies	
CE-GY 8333	Marketing for Construction Management and Engineering Services Mktg for Const Mgmt & Engr Serv	
CE-GY 8343	Construction Site Safety	
CE-GY 8353	Construction Scheduling	
CE-GY 8373	Construction Accounting and Finance	
CE-GY 8383	Building Information Modeling (BIM) and Its Applications in AEC/FM	
CE-GY 8703	Managing and Leading in the 21st Century	
CE-GY 8713	Construction and the Law	
CE-GY 8733	Infrastructure Financing: Structuring of a Deal	
CE-GY 8763	Capital Program Management/Program Development	
ROB-GY 6203	Robot Perception	
Electives		
Select 9 credits of elective courses that may include additional courses from the major requirements list above, and the following internship courses:		9
Internship Course Options		
CE-GY 9105	Principles of Professional Practice I: Ethics	
CE-GY 9205	Principles of Professional Practice II: Management	
CE-GY 9305	Principles of Professional Practice III: Leadership	
Capstone [1]		
Select one of the following: [2]		3
CE-GY 8393	Leadership, Ethics and Project Execution	
CE-GY 9963	MS Project in Civil & Urban Engineering Department	
Total Credits		**30**

1. A student shall not enroll in any capstone course until after having completed 18 credits or in the final semester of enrollment in the program, whichever is sooner.
2. Other capstone options may be taken with the approval of the program director.

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
CE-GY 8243	Construction Modeling Techniques (Major Requirement Course 1)	3
CE-GY 8253	Project Management for Construction (Major Requirement Course 2)	3
CE-GY 8263	Construction Cost Estimating (Major Requirement Course 3)	3
	Credits	**9**
2nd Semester/Term		
CE-GY 8283	Risk Analysis (Major Requirement Course 4)	3
CE-GY 8353	Construction Scheduling (Major Requirement Course 5)	3
ROB-GY 6203	Robot Perception (Major Requirement Course 6)	3
	Credits	**9**
3rd Semester/Term		
CE-GY 8333	Marketing for Construction Management and Engineering Services Mktg for Const Mgmt & Engr Serv (Elective 1)	3
CE-GY 8373	Construction Accounting and Finance (Elective 2)	3
CE-GY 8383	Building Information Modeling (BIM) and Its Applications in AEC/FM (Elective 3)	3
	Credits	**9**
4th Semester/Term		
CE-GY 8393	Leadership, Ethics and Project Execution (Capstone Course)	3
	Credits	**3**
	Total Credits	**30**

Learning Outcomes

Upon successful completion of the program, graduates will:

1. Learn management and leadership practices.
2. Learn how to apply innovative organizational, technological, planning, and financial tools to construction projects and programs.
3. Learn the importance of effective communication with all construction industry players.

Policies

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/).