

# EXECUTIVE CONSTRUCTION MANAGEMENT (ADVANCED CERTIFICATE)

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

NYSED: 21964 HEGIS: 0599.00 CIP: 14.3301

## Program Description

After several years in the construction management field, professionals may find that they want to add even more value to their career – from figuring out how to improve financing to knowing which high-tech products best fit their construction projects to learning how to communicate with diverse client, worker, and public groups. The Tandon School of Engineering's Advanced Certificate program in Executive Construction Management (Exec 21) enables experienced professionals to combine their longtime professional experience with structured coursework to elevate their career.

Even more, it allows them to earn formal certification in their field without having to commit full-time to an advanced degree program. We also welcome students who have already earned bachelor's or master's degrees, but wish to specialize in construction management.

Our students join esteemed faculty and industry professionals in studying effective leadership skills, as well as other topics critical to construction management. Classes are small, specialized, and widely respected throughout the industry – the program received an Academic Achievement Award from the Construction Management Association of America (CMAA), an honor shared by students and faculty alike.

## 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 advanced certificate requires the completion of 15 credits. A minimum of 9 credits must be selected from the Exec 21 Core Courses, and up to 6 credits may be selected from those courses that satisfy the Major Requirement for the Master of Science in Construction Management.

**Note:** the Exec 21 Core courses are also Major Requirement courses for the MS in Construction Management. Hence, these courses are listed on both lists.

| Course                               | Title   | Credits |
|--------------------------------------|---|---------|
| <b>Exec 21 Core Courses</b>          |   |         |
| Select 9 credits from the following: |   | 9       |
| 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  |         |
| CE-GY 8773                           | Dispute Avoidance and Resolution                |         |

|                                   |  |    |
|-----------------------------------|--|----|
| CE-GY 8803                        | Infrastructure Planning for Public Works |    |
| <b>Electives</b>                  |  |    |
| Construction Management Electives |  | 6  |
| <b>Total Credits</b>              |  | 15 |

## Major Requirement Courses for MS Construction Management

| Course                    | Title  | Credits |
|---------------------------|--|---------|
| <b>Major Requirements</b> |  |         |
| CE-GY 7963                | Selected Topics in Construction I  | 3       |
| CE-GY 8243                | Construction Modeling Techniques   | 3       |
| CE-GY 8253                | Project Management for Construction  | 3       |
| CE-GY 8263                | Construction Cost Estimating   | 3       |
| CE-GY 8273                | Contracts and Specifications   | 3       |
| CE-GY 8283                | Risk Analysis  | 3       |
| CE-GY 8293                | Construction Operations Analysis   | 3       |
| CE-GY 8313                | Engineering for Construction I: Methods and Technologies                                       | 3       |
| CE-GY 8333                | Marketing for Construction Management and Engineering Services Mktg for Const Mgmt & Engr Serv | 3       |
| CE-GY 8343                | Construction Site Safety   | 3       |
| CE-GY 8353                | Construction Scheduling  | 3       |
| CE-GY 8373                | Construction Accounting and Finance  | 3       |
| CE-GY 8383                | Building Information Modeling (BIM) and Its Applications in AEC/FM                             | 3       |
| CE-GY 8703                | Managing and Leading in the 21st Century   | 3       |
| CE-GY 8713                | Construction and the Law   | 3       |
| CE-GY 8733                | Infrastructure Financing: Structuring of a Deal  | 3       |
| CE-GY 8763                | Capital Program Management/Program Development   | 3       |
| CE-GY 8773                | Dispute Avoidance and Resolution   | 3       |
| CE-GY 8803                | Infrastructure Planning for Public Works   | 3       |
| ROB-GY 6203               | Robot Perception   | 3       |

## Sample Plan of Study

| Course                           | Title | Credits |
|----------------------------------|-------|---------|
| <b>1st Semester/Term</b>         |       |         |
| Exec 21 Core Course              |       | 3       |
| Exec 21 Core Course              |       | 3       |
| <b>Credits</b>                   |       |         |
| <b>2nd Semester/Term</b>         |       |         |
| Exec 21 Core Course              |       | 3       |
| Construction Management Elective |       | 3       |
| <b>Credits</b>                   |       |         |
| <b>3rd Semester/Term</b>         |       |         |
| Construction Management Elective |       | 3       |
| <b>Credits</b>                   |       |         |
| <b>Total Credits</b>             |       |         |
|                                  |       | 15      |

## 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

### Program Policies

#### GPA Requirement

Students must maintain a B (3.0) cumulative grade point average (GPA) in all graduate courses taken.

### 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/>).