

# TRAFFIC ENGINEERING (ADVANCED CERTIFICATE)

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

**NYSED:** 84180 **HEGIS:** 0908.00 **CIP:** 14.0804

## Program Description

Anyone who has spent time in a city knows how frustrating it can be to get from one place to the next. Accidents paralyze long stretches of freeway, rush hour congestion slows traffic to a crawl, and crowded intersections can become an obstacle course for pedestrians. Traffic engineers understand how highly functional roads and highways ease such frustrations. It's their job to properly design and manage our traffic systems, to act as the caretakers of our cities' economic and social health.

The Advanced Certificate in Traffic Engineering program trains our students to become those caretakers. As one of the world's busiest and most populous regions, the New York City metro area provides a natural testing ground for the study of traffic systems. Our curriculum focuses on urban freeway and intercity networks, the management of arterial and street space, and the design and control of intersections. It also introduces you to the concepts and applications of Intelligent Transportation Systems (ITS) and its increasing importance in the field of traffic engineering.

Whether you're a working professional or a student seeking a highly focused, part-time course of study, our certificate provides specialized knowledge that you can apply immediately in the field. You'll also have the foundation to pursue further studies in the future: each of our courses can be transferred to an advanced degree program.

## 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

Students will complete a total of 12 credits for Traffic Engineering Advanced Certificate.

Course	Title	Credits
<b>Core Courses</b>		
TR-GY 6053	Transportation Economics and Finance Fundamentals	3
TR-GY 6333	Transportation & Traffic Concepts, Characteristics & Studies	3
TR-GY 6343	Traffic Operations & Control	3
<b>Elective Course</b>		
Select one of the following:		3
TR-GY 6223	Intelligent Transportation Systems and Their Applications	
TR-GY 7033	Multimodal Transportation Safety	
<b>Total Credits</b>		<b>12</b>

## Sample Plan of Study

Course	Title	Credits
<b>1st Semester/Term</b>		
TR-GY 6053	Transportation Economics and Finance Fundamentals	3
TR-GY 6333	Transportation & Traffic Concepts, Characteristics & Studies	3
<b>Credits</b>		<b>6</b>
<b>2nd Semester/Term</b>		
TR-GY 6343	Traffic Operations & Control	3
Elective		3
<b>Credits</b>		<b>6</b>
<b>Total Credits</b>		<b>12</b>

## Learning Outcomes

Upon successful completion of the program, graduates will:

1. Fundamentally understand the nature of traffic facilities.
2. Control and operate traffic and other transportation facilities.
3. Apply information technologies to intelligent transportation systems.

## 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/>).