TRANSPORTATION MANAGEMENT (MS)

NYSED: 83320 **HEGIS:** 0510.00 **CIP:** 14.0804

Program Description

Systems of transportation are changing rapidly in conjunction with and as a response to evolving technology; shifting human mobility patterns; increasing efforts to build toward equity, sustainability, and resilience; and the popularization of new methods of transit, like the advent of ridesharing and the spread of micromobility modes such as e-scooters and bikeshares.

The Tandon School of Engineering's MS in Transportation Management takes an adaptive, whole-system approach to transit which considers the logistical transportation problems of mobility in increasingly smart cities through an integrated lens.

Located in a city with one of the world's most complex transit systems, our campus is a gateway to an ideal laboratory for those wishing to study the discipline. Courses like Intelligent Cities: Technology Policy and Planning explore the landscape of technologies being used in urban planning and policymaking today. Together, our students and faculty focus on the fundamentals of management and the economics at play for public and private sector agencies as they interact with local, state, and national policies affect residents and businesses. Students will be exposed to concepts from a host of fields and specialties, included but not limited to data and predictive analytics, smart transportation and smart cities, urban planning and public policy, and technological innovation, and leave prepared to help build the future of transportation.

Admissions

Admission to graduate programs in the Tandon School of Engineering requires the following minimum components:

- Résumé/CV
- Statement of Purpose
- Letters of Recommendation
- Transcripts
- Proficiency in English

The NYU Tandon Graduate Admissions website (https://engineering.nyu.edu/admissions/graduate/apply/requirements/) has additional information on school-wide admission.

Some programs may require additional components for admissions.

See the program's How to Apply (https://engineering.nyu.edu/admissions/graduate/how-apply/) for department-specific admission requirements and instructions.

Requirements

To be eligible for admission to the School of Engineering's MS in Transportation Management program, you must hold at least a baccalaureate degree from an acceptable institution. You must also show evidence of quantitative analytic ability, generally including a minimum of 2 years of college mathematics. A college-level course in statistics is desirable.

If admitted, students lacking such skills must take remedial courses in addition to degree requirements to strengthen their analytic competency.

Program Requirements

Course	Title	Credits
Required Courses		
TR-GY 6053	TRANSPORTATION ECONOMICS AND FINANCE FUNDAMENTALS	3
TR-GY 6223	Intelligent Transportation Systems and Their Applications (or alternative course approved by the Academic Advisor)	3
TR-GY 7223	Management of Transit Maintenance and Operations	3
TR-GY 7133	Urban Public Transportation Systems	3
or TR-GY 7073	Travel Behavioral Informatics	
CE-GY 8203	PROJECT MANAGEMENT	3
or CE-GY 8253	Project Management for Construction	
Electives		
Select five of the following: [1]		15
TR-GY 6343	TRAFFIC OPERATIONS & CONTROL	
TR-GY 7013	Urban Transportation & Logistics Systems	
TR-GY 7033	MULTIMODAL TRANSPORTATION SAFETY	
TR-GY 7063	STOCHASTIC MODELS AND METHODS FOR ENGINEERING SYSTEMS	
TR-GY 7073	Travel Behavioral Informatics	
TR-GY 7133	Urban Public Transportation Systems	
TR-GY 7353	DATA-DRIVEN MOBILITY MODELING & SIMULATION	
TR-GY 8013	Selected Topics in Transportation I	
CE-GY 7983	SELECTED TOPICS IN INFRASTRUCTURE SYSTEMS	
Total Credits		**30**

[1]

Students may choose any elective course from the Transportation catalogue, including those listed.

Additional Elective Options

Students may also choose relevant graduate courses offered by CUSP (https://cusp.nyu.edu/), the Wagner School of Planning and Public Policy's Urban Planning (https://wagner.nyu.edu/education/degrees/master-urban-planning/) and Public Administration (https://wagner.nyu.edu/education/degrees/mpa-public-nonprofit-management-policy/) programs, or other Management (https://engineering.nyu.edu/academics/departments/technology-management-and-innovation/student-resources/mot-course-list/) courses, with the approval of their advisor.

View a more complete list of pre-approved courses (https://engineering.nyu.edu/academics/programs/transportation-management-ms/electives/).

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
CE-GY 8253	Project Management for Construction	3
TR-GY 6343	TRAFFIC OPERATIONS & CONTROL	3

TR-GY 7223	Management of Transit Maintenance and Operations	3
	Credits	**9**
2nd Semester/Term		
TR-GY 6053	TRANSPORTATION ECONOMICS AND FINANCE FUNDAMENTALS	3
TR-GY 7133	Urban Public Transportation Systems	3
TR-GY 7353	DATA-DRIVEN MOBILITY MODELING & SIMULATION	3
	Credits	**9**
3rd Semester/Term		
TR-GY 6113	Forecasting Urban Travel Demand	3
TR-GY 7013	Urban Transportation & Logistics Systems	3
Elective		3
	Credits	**9**
4th Semester/Term		
TR-GY 7073	Travel Behavioral Informatics	3
	Credits	**3**
	Total Credits	**30**

Learning Outcomes

The primary goal of the MS in Transportation Management is to prepare professionals to effectively and efficiently manage various transportation enterprises. The emphasis is on agencies, facilities and services in the public sector. Specific objectives of the program are to provide:

1. A basic background in management skills and techniques, specifically as applied to public and private transportation organizations;
2. Basic understanding of the economic aspects of the transportation sector;
3. An understanding of the importance of national, state and local transportation policy on public and private sector organizations;
4. Fundamental knowledge on some specific issues and problems in managing and operating public transportation facilities.

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/).