# Telecommunication Networks, MS (Boston)

For program contact information, please visit this website (https://coe.northeastern.edu/academics-experiential-learning/academic-departments/mgen/ms-tnet/).

The Master of Science in Telecommunication Networks is designed for professionals currently in the telecommunications or networking field who either wish to enhance their technical skills and credentials or who wish to make a transition to the business side of telecommunications or networking. We also welcome applications from prospective students with limited industry experience. This program, which may be pursued on a full- or part-time basis, is one of only a very few master's programs in telecommunications and networking in the United States that is truly multidisciplinary, giving students the flexibility to tailor the curriculum to their specific interests, backgrounds, and career goals.

#### **Degree Requirements**

Students in the program must complete 32 semester hours of approved coursework with a minimum grade-point average of 3.000. Students can complete a master's degree by pursuing any of one of the three options: coursework, project, or thesis. Although there are some dependencies among the core courses, the program may be started in either the fall or spring semester. The three core courses each carry 4 semester hours of credit.

Master's project and thesis options must be carried out under the supervision of a professor and must have prior approval of the program director. Proposals for a master's project or a thesis need to be submitted at least one month before the start of the semester.

### **Graduate Certificate Options**

Students enrolled in a master's degree have the opportunity to also pursue one of the many engineering graduate certificate options in addition to or in combination with the MS degree. Students should consult their faculty advisor regarding these options (https://catalog.northeastern.edu/graduate/ engineering/graduate-certificate-programs/).

#### **GORDON INSTITUTE OF ENGINEERING LEADERSHIP**

#### Master's Degree in Telecommunication Networks with Graduate Certificate in Engineering Leadership

Students may complete a Master of Science in Telecommunication Networks in addition to earning a Graduate Certificate in Engineering Leadership (https://catalog.northeastern.edu/graduate/engineering/multidisciplinary/engineering-leadership-graduate-certificate/). Students must apply and be admitted to the Gordon Engineering Leadership Program in order to pursue this option. The program requires fulfillment of the 16-semester-hour curriculum required to earn the Graduate Certificate in Engineering Leadership, which includes an industry-based challenge project with multiple mentors. The integrated 32-semester-hour degree and certificate require 12 semester hours of technical core courses from the telecommunication networks program and 4 semester hours from the technical course list provided for this program. For students who concurrently enroll in the Graduate Certificate in Engineering Leadership, 16 semester hours of the certificate coursework may be applied to this program's elective requirements.

#### **Program Requirements**

Complete all courses and requirements listed below unless otherwise indicated.

#### **Core Requirements**

Code	Title	Hours
TELE 5330 and TELE 5331	Data Networking and Lab for TELE 5330	4
TELE 5350	Telecom and Network Infrastructure	4
TELE 5360	Internet Protocols and Architecture	4

#### **Options**

Complete one of the following options:

COURSEWORK OPTION		
Code	Title	Hours
Complete 20 semester hours from the electives course list below. (p. 2)		20
PROJECT OPTION		
Code	Title	Hours
TELE 7945	Master's Project	4
Complete 16 semester hours from the electives course list below. (p. 2)		16

THESIS UPTION		
Code	Title	Hours
TELE 7945	Master's Project	4
TELE 7990	Thesis	4
Complete 12 semester hours from the electives course list below. (p. 2)		

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In addition to completing the thesis course, students must successfully complete the thesis submission process, including securing committee and Graduate School of Engineering signatures and submission of an electronic copy of their MS thesis to ProQuest.

#### **Electives**

ode	Title	
Complete courses from any of the following subject codes:		
CSYE		
DAMG		
INFO		
TELE		
	CSYE DAMG INFO	

# **Optional Co-op Experience**

Code	Title	Hours		
Complete the following (students must complete ENCP 6000 to qualify for co-op experience):				
ENCP 6000	Career Management for Engineers	1		
ENCP 6964	Co-op Work Experience	0		
or ENCP 6954	Co-op Work Experience - Half-Time			
or ENCP 6955	Co-op Work Experience Abroad - Half-Time			
or ENCP 6965	Co-op Work Experience Abroad			

## **Program Credit/GPA Requirements**

Minimum of 32 total semester hours required (33 with optional co-op) Minimum 3.000 GPA required