

Technology Leadership, Graduate Certificate (Boston)

The Graduate Certificate in Technology Leadership offered by the Gordon Institute of Engineering Leadership (GIEL) is a transformational graduate program designed to build a future corps of technology leadership professionals. GIEL seeks to accelerate leadership development capability in a technical context through a concentrated curriculum that inculcates both the psychological skills and capabilities needed to lead in parallel with technical skills to successfully release products to customers and markets. The program teaches relevant leadership theory followed by practice in leadership laboratories. Technical product development and scientific principles courses are followed by the completion of a market-worthy challenge project. This learning framework is supplemented with three-way mentoring from industry, faculty, and program mentors. Graduates of the program, known as Gordon Fellows, have an opportunity to gain the knowledge, skills, and attitudes required to successfully lead technical teams. They stand out from their peers in their ability to invent, innovate, and implement technology projects from concept to market success. Participation in GIEL accelerates Gordon Fellows' careers, making them more valuable to their company.

The Challenge

When relatively unseasoned professionals run teams or projects, most fail to satisfy all of the project's critical requirements—missing the mark in functionality, performance, quality, time-to-market, cost, or other key objectives.

This shortfall exists because professionals enter the workforce without critical skills related to:

- Competitiveness
- Taking responsibility to prevent failure
- Market and customer focus
- Influencing and motivating skills
- Interdisciplinary decision making and teamwork capability
- Simultaneous optimization of all elements of performance, quality, cost, and timing
- Front-loading the technology delivery process
- Financial acumen
- Big-picture engineering
- Leadership abilities and organizational social awareness
- Enterprise understanding
- Program management tools and processes
- Designing to avoid failure modes
- Designing for lean manufacture

The Mission

GIEL's mission is to create an elite cadre of technology leaders who stand out from their peers in their ability to invent, innovate, and implement technical projects from concept to market success.

These leaders will demonstrate an exceptional ability to lead teams by providing purpose, direction, and motivation to influence others to achieve their collective goals.

The Method

To close the gaps and realize its mission, GIEL concentrates on the knowledge, skills, and abilities that reside at the intersection of technology and leadership.

At the end of the program, Gordon Fellows emerge with the awareness, confidence, vision, and technical dexterity to drive positive change within their organizations and society.

Admissions

Candidates must apply for and be admitted to both a master's degree program at Northeastern and the Graduate Certificate in Technology Leadership.

Students pursue the Graduate Certificate in Technology Leadership as part of a master's degree or as a stand-alone graduate certificate. Upon completion of a Master of Science degree, students earn both the Master of Science degree in the discipline of choice and a Graduate Certificate in Technology Leadership. Students who already hold a graduate degree or have greater than three years' industry work experience can complete

the program to earn a stand-alone Graduate Certificate in Technology Leadership. The core GIEL curriculum takes place during one calendar year (September–July), and additional coursework required for the Master of Science degree can be pursued before, after, or in parallel with GIEL.

For more information contact Amy Manley, Director of Admissions and Marketing, (617) 373-4800 or a.manley@northeastern.edu.

Program Requirements

Code	Title	Hours
TELR 5121	Technology Leadership 1	2
TELR 5122	Technology Leadership 2	2
TELR 5131	Scientific Foundations of Technology 1	2
TELR 5132	Scientific Foundations of Technology 2	2
TELR 7440	Technology Leadership Challenge Project 1	4
TELR 7442	Technology Leadership Challenge Project 2	4

¹ The Scientific Foundations of Technology 1 (TELR 5131) and Scientific Foundations of Technology 2 (TELR 5132) requirements may be met by completion of another course upon approval of the program director.

Program Credit/GPA Requirements

16 total semester hours required

Minimum 3.000 GPA required