

# ENGINEERING MANAGEMENT (MENG)

College of Engineering

Program Website (<https://www.engineering.cornell.edu/mem/>)

CIP: 15.1501 | HEGIS: 4904.00 | NYSED: 31007

## Program Description

The Master of Engineering (M.Eng.) in Engineering Management program is designed for individuals with STEM backgrounds who want to stay in a technical environment but advance to managerial roles. Students learn to identify problems, formulate and analyze models to understand these problems, and interpret the results of analyses for managerial action.

The Engineering Management program has two groups of students: traditional on-campus students and distance learning students.

On-campus students come from a variety of engineering, computer science and other STEM backgrounds, with zero to four years of work experience. Students typically take two or three semesters to complete their program. The program has several established tracks including Consulting, Product Management and Entrepreneurship, Real Estate and Construction Management, Engineering Leadership, Sustainability and Renewable Energy, Infrastructure in a Changing World with electives chosen to emphasize different application domains. Alternatively, students may put together their own program plan upon the recommendation of their advisor if an established track does not meet their educational goals.

The distance learning (DL) program is best suited for professionals who are currently working in industry and are enrolled in the program part-time. The average work experience of the DL cohort is about 8 years, however there is no required work experience to be considered for the program. The typical timeframe for these students to complete the requirements is two to three years, however students may expand their course of study over as long as 6 years. Course content is the same as for on-campus students, with the addition of a one-week on-campus residential intensive session, and a professional development course. This format of the M.Eng. degree can be earned online, making it perfect for the busy professional who wants to earn their degree on a part-time basis. Content delivery is achieved through both synchronous and asynchronous technologies. DL students interact with on-campus students in many of their classes, which can facilitate the learning process for both groups of students. We welcome any questions about the delivery of classes and other questions related to distance learning.

## On-Campus Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 32

## Distance Learning Program Information

- Instruction Mode: Distance Education
- Location: Ithaca, NY (for on-campus residential session)
- Minimum Credits for Degree: 30

## Program Requirements

### On-Campus Program

Code	Title	Hours
<b>Core Required Courses</b>		
ENMGT 5900	Project Management	4
ENMGT 5910	Engineering Management Project	4
ENMGT 5930	Data Analytics	4
ENMGT 5940	Economics and Finance for Engineering Management	4
ENMGT 5980	Decision Framing and Analytics	3
<b>Additional Required Courses</b>		
ENMGT 6090	Professional and Leadership Development Seminar	1
ENMGT 6091	Seminar: Project Management	1
<b>Organizational Elective</b>		
Select one of the following:		3
ENMGT 5960	Negotiations and Contracts for Engineering Managers	
ENMGT 5990	Contemporary Challenges for Engineering Managers	
ENMGT 6020	Managing a Culture of Innovation	
<b>On-Campus Graduate-level Electives</b>		<b>9</b>
<b>Total Hours</b>		<b>33</b>

### Distance Learning Program

Code	Title	Hours
<b>Core Required Courses</b>		
ENMGT 5900	Project Management	4
ENMGT 5910	Engineering Management Project	4
ENMGT 5930	Data Analytics	4
ENMGT 5940	Economics and Finance for Engineering Management	4
ENMGT 5980	Decision Framing and Analytics	3
<b>Additional Required Courses</b>		
ENMGT 5080	Introduction to Python Basics <sup>1</sup>	1
ENMGT 6001	Residential Intensive I	1
ENMGT 6095	Special Topics in Engineering Management <sup>2</sup>	0.5-6
<b>Organizational Elective</b>		
Select one of the following:		3
ENMGT 5960	Negotiations and Contracts for Engineering Managers	
ENMGT 5990	Contemporary Challenges for Engineering Managers	
ENMGT 6020	Managing a Culture of Innovation	
ENMGT 6030	Learning to Lead	
<b>Distance General Electives</b>		
Minimum 2 courses of graduate-level electives		6
<b>Total Hours</b>		<b>30.5-36</b>

<sup>1</sup> Note: students with significant experience in programming and using Python may option out of ENMGT 5080 Introduction to Python Basics.

<sup>2</sup> Enrollment of 2 semesters for the Professional Development workshop is required (totaling 1 credit).

## University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

### Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (<https://registrar.cornell.edu/service-resources/college-registrar-directory/>) for more information.

### Non-academic Requirements

**Conduct Matters.** Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

**Financial Obligations.** Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

## Graduation Requirements for Master of Engineering Degree (M.Eng.) Programs

### Requirements

The following are general requirements for graduation that apply to all Master of Engineering degrees offered on the Ithaca campus. The individual program pages provide additional information about discipline-specific requirements.

### Credits and Residency Units

- Satisfactory completion of 30 technical credits, of which:
  - At least 21 credits must be earned at Cornell. (Some M.Eng. programs allow up to 9 transfer credits of letter-graded coursework completed outside of Cornell to be applied to the M.Eng. degree.)
  - At least 12 credit hours must be in coursework from the home M.Eng. program (as determined by the program).
  - A maximum of two credit hours graded on an S/U basis may be included.
- The credit hours of any course in which a student receives a grade below C- will not count toward the Master of Engineering degree.
- Students must maintain a course load of at least 12 credit-bearing hours<sup>1</sup> each semester.
- Students may not enroll in more than 20 credit-bearing hours per semester.

- Students must complete two full-time residency units<sup>1</sup> (semesters) as registered M.Eng. students. Winter and summer sessions do not count as residency units.

<sup>1</sup> Course load and residency unit exceptions apply for Distance Learning program students, employee degree program students, and Industrial Partnership Program students. The residency unit requirement is one full-time registered semester for Early Admit M.Eng. students and certain Cornell MPS/MS/PhD student transfers.

### Courses

- Only program-approved courses at the 5000 level and above may count toward the M.Eng. degree.
- Courses covering subject matter previously taken at Cornell may not be repeated for credit.
- Satisfactory completion of an engineering design project bearing 3 or more credit hours and including a formal written report.

### Other Requirements

- A grade-point average of 2.50 or above is required across all Cornell courses which count for credit towards the M.Eng. degree.
- Students must complete all degree requirements within four calendar years of their first enrollment in the M.Eng. program (six years for distance learning students), inclusive of any leaves of absence.
- Students must complete the M.Eng. Exit Survey prior to graduation.