

MECHANICAL ENGINEERING (MENG)

College of Engineering

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

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Program Description

The Master of Engineering (M.Eng.) Mechanical Engineering degree program offers two options for study, a traditional one-year (two semester) on-campus program and a distance learning (DL) part-time program that can be completed in two to three years. The course of study is for those who wish to develop a higher level of competence in engineering science, current technology, and engineering design. The program is geared for students who wish to work in industry after graduation, entering at a higher and more focused level and industrial professionals that wish to enhance their technical skills and accelerate career advancement.

The program is designed to be flexible so that candidates may concentrate on a variety or combination of specialty areas. These include biomechanical engineering, energy systems, design, robotics, spacecraft engineering, engineered materials, simulation and analysis and controls.

The program's flexibility allows students to build an individualized program of courses. Students are required to complete 30 credits of work at the graduate level (of which at least 28 credits must have letter grades). Each student's curriculum includes a 4 to 8 credit design project and a minimum of 12 credits in mechanical engineering or a closely related field. The remaining credits can consist of additional technical or engineering tool courses and/or professional development courses.

Design projects have applications to mechanical engineering focus areas. The projects may arise from individual faculty and student interests or from collaboration with industry. All projects are done under the close supervision of a faculty member or industrial partner.

Program Information

- Instruction Mode: In Person; Distance Education
- Location: Ithaca, NY
- Minimum Credits for Degree: 30

Program Requirements

To receive an M.Eng. degree in Mechanical Engineering the following requirements must be met:

1. A minimum of 30 credit hours of graduate coursework (5000 level or above), 28 credits of which must be taken for a letter grade. Most courses must be of a technical nature (those found in Cornell Engineering, as well as those in mathematics, physics, and other sciences, are generally considered technical courses). One or two courses that are related to your overall goals for your degree but are non-technical (for example, finance) may be approved as well.
2. A minimum of 12 credit hours (not including the project or seminar courses) of coursework in Mechanical and Aerospace Engineering.
3. Courses taken must match the "Program of Courses" form, which must be submitted to the M.Eng. Office at the beginning of your

program and by the end of the second week of classes. Any changes made to it must be updated by submitting a new form.

4. A project (usually taken under MAE 6900) for at least 4 and not more than 8 credits and submitting an electronic abstract of your project report and a copy of your final report to the MAE M.Eng. program.
5. A minimum cumulative M.Eng. GPA of 2.5.
6. No grade below a C-.
7. One residence unit (at least one semester registered as a full-time student in the M.Eng. program).
8. Registration limit of 20 credits per semester, minimum registration 12 credits per semester.

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 hours¹ each semester.
- Students may not enroll in more than 20 credit-bearing hours per semester.
- Students must complete two full-time residency units¹ (semesters) as registered M.Eng. students. Winter and summer sessions do not count as residency units.

¹ 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.