

Master's Program Information

Master of Engineering Versus Master of Science Degrees

Master of Engineering (MEng) degrees are typically viewed as terminal degrees allowing maximum flexibility in course selection. Master of Science (MS) degrees are more structured in terms of required course work, and students with undergraduate degrees specifically in engineering are often better prepared to enter these master's programs. Graduates from MS programs are better prepared to move forward to doctoral programs, as they often become more involved in research experience. However, MS programs also include course-only options for those not interested in doing research.

There are different ways to earn a master's degree at Washington University:

- There are a number of Engineering disciplines that admit students who wish to pursue a terminal master's degree. In some programs, both the course option and thesis option are available.
- Undergraduate students at Washington University may apply for the Bachelor's/Master's program in Engineering, in which graduation with a BS or AB is followed by graduate study leading to the master's degree. This option is described in the Bachelor's/Master's Program in Engineering section of the *Undergraduate Bulletin*.
- Students who have not previously earned a master's degree in the same field as their PhD may earn the MS on the way to their PhD. This option is available in some disciplines but not in all of them.
- Students who have not previously earned a master's degree in the same field as their PhD may be awarded an MS for work done in a PhD program that they are leaving without completing. This option is available in some disciplines but not in all of them.

General Requirements

Candidates for master's degrees should note that, in most MS programs, both the thesis option and the course option are available. The course option may be of particular interest to part-time students who, because of their employment, might find it more convenient than the thesis requirement. All candidates for the master's degrees should consult with their advisor to determine the option they will follow.

All requirements for master's degrees must be completed within six years from the time the student is admitted to graduate standing. A maximum of 6 units of graduate credit obtained at institutions other than Washington University may be applied toward the master's degree awarded by Engineering. Transfer credit must be recommended and approved by the department chair or program director and advisor, as well as by the Engineering registrar. No courses carrying grades lower than B can be accepted for transfer credit.

For the thesis option, a minimum of 24 units of course work and a minimum of 6 units of research are required. The student must also write a satisfactory thesis prepared under the supervision of a member of the Engineering faculty. Candidates for master's degrees under the course option must submit a minimum of 30 units of approved graduate course credit. A department may have additional requirements beyond the minimum requirement stated previously. Students should consult with their advisor as several master's degrees require more than 30 graduate units.

Multiple Master's Degrees

To earn more than one master's degree from Engineering, the student's final program of course work for each such master's degree must include a minimum of 15 units of preapproved courses not included as part of the final program of course work for any other master's degree awarded by Engineering.

Master's Thesis

A candidate for the MS degree under the thesis option should prepare their thesis according to the Master's Thesis Format Guidelines found on the Engineering website.

The candidate's department chair or program director will appoint a thesis committee of three faculty members, with the student's advisor as chair, who will read the thesis and judge its acceptability.

Master's Final Examinations

The final examination for the MS candidates under the thesis option consists of an oral examination conducted by the thesis committee and any additional faculty members that the department or program chairman may wish to designate. At this examination, the candidate will present and defend the thesis.

Candidates for the MS under the course option may be required to pass a final examination. The form of this examination is determined by the faculty of the area of specialization, and students should consult their advisors, department chairs, or program directors for details concerning this examination.

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