

CIVIL ENGINEERING, MSE

Our Master of Science and Engineering (M.S.E.) Program develops a sound understanding of the scientific principles upon which engineering research and practice are based. Different aspects of learning are integrated through classroom, laboratory instruction, and independent study experiences. Graduates of the program possess critical thinking skills, the ability for both independent and team problem-solving, and a sense of the excitement of engineering creativity and design. The program also develops communication skills necessary for its graduates to function in teams and to deal with other professions in public and private arenas. Its progressive education furthers student understanding of the context in which engineering is practiced in modern society. Thus, the program educates leaders for tomorrow, providing the tools and perspectives for a lifetime of learning, opportunities, and professional advancement.

Typically limited financial support is available for M.S.E. students. Funding decisions will be made on an individual basis by the Department of Civil and Systems Engineering and will be communicated during the admissions process.

Program Requirements

After admission to the M.S.E. program, students must successfully complete one of two requirements in order to obtain the M.S.E. degree:

Course-Only MSE Requirements

The most common path for M.S.E. graduate students is to complete the degree through coursework alone. The M.S.E. degree requirements are as follows*:

1. Minimum course requirements: 8 courses** at the 600-level or above:

- 4 of which must be from civil engineering - EN.560.XXX or EN.565.XXX
- 7 of which must be technical

2. Required courses, but do not count towards minimum course requirements:

- Civil Engineering Graduate Seminar - Fall semester – EN.560.691 Graduate Seminar
- Civil Engineering Graduate Seminar - Spring semester – EN.560.692 Civil Engineering Graduate Seminar
- Academic Ethics short course EN.500.603 Graduate Orientation and Academic Ethics
- Responsible Conduct of Research short course: AS.360.624 Responsible Conduct of Research (Online) or AS.360.625 Responsible Conduct of Research

3. Acceptable grades: B- and above. Only one course with a grade C or C- are allowed toward the degree requirements

4. First three semesters must be full-time. The fourth semester can be part-time.*** It is expected that the degree will be completed in one year with the student enrolling in 4 courses per semester, although in select cases students may require a third semester of study

5. CPT internship credits for international students do not count toward the completion of a M.S.E. degree

6. Externship

7. Transfer credits are not permitted

*Students must comply with all requirements stipulated by the Whiting School of Engineering Academic Policies and Procedures as outlined at <https://engineering.jhu.edu/graduate-studies/academic-policies-procedures-graduate/>

**Academic advisors, in consultation with the faculty in the department, will determine whether the 8 courses leading to this degree are appropriate and if they have been completed satisfactorily.

***See the department Sr. Academic Program Coordinator or Director of Graduate Studies to determine if you are eligible for part-time status.

Notes:

1. It is expected that the degree will be completed in one year with the student enrolling in 4 courses per semester, although in select cases students may require a third semester of study.
2. Typically limited financial support is available for M.S.E. students. Funding decisions will be made on an individual basis by the Department of Civil and Systems Engineering and will be communicated during the admissions process.
3. Students are expected to maintain a GPA of 2.6 each semester or be placed on probation. See the Probation Policy for master's students (<https://engineering.jhu.edu/civil/graduate-programs/masters-program/policies-and-procedures/>) for more details.

MSE with Thesis Requirements

The M.S.E. with thesis option is primarily intended for students interested in pursuing a Ph.D. The M.S.E. degree requirements are as follows*:

1. Minimum course requirements: 7 courses** at the 600-level or above:

- 4 of which must be from civil engineering - EN.560.XXX or EN.565.XXX
- 6 of which must be technical

2. Required courses, but do not count towards minimum course requirements:

- Civil Engineering Graduate Seminar - Fall semester – EN.560.691 Graduate Seminar
- Civil Engineering Graduate Seminar - Spring semester – EN.560.692 Civil Engineering Graduate Seminar
- Academic Ethics short course EN.500.603 Graduate Orientation and Academic Ethics
- Responsible Conduct of Research short course (required): AS.360.624 Responsible Conduct of Research (Online) or AS.360.625 Responsible Conduct of Research

3. Acceptable grades: B- and above. Only one course with a grade C or C- are allowed toward the degree requirements

4. Final essay that is approved by the research advisor and one additional reader who is required to be a full-time departmental faculty member. Any external reader must be approved by the Department Chair

5. Research presentation in a public forum attended by two members of the WSE faculty or other faculty approved by the Department Chair

6. First three semesters must be full-time. The fourth semester can be part-time.*** The M.S.E. with thesis program is expected to be completed in 3-4 semesters with the student enrolled in 2-3 courses per semester in addition to research. Summer research is typical but not necessary and is left to the discretion of the student and advisor.

7. CPT internship credits for international students do not count toward the completion of a M.S.E. degree

8. Externship

9. Transfer credits are not permitted

*Students must comply with all requirements stipulated by the Whiting School of Engineering Academic Policies and Procedures as outlined at <https://engineering.jhu.edu/graduate-studies/academic-policies-procedures-graduate/>

**Academic advisors, in consultation with the faculty in the department, will determine whether the 7 courses leading to this degree are appropriate and if they have been completed satisfactorily.

***See the department Sr. Academic Program Coordinator or Director of Graduate Studies to determine if you are eligible for part-time status.

Notes:

1. Typically limited financial support is available for M.S.E. students. Funding decisions will be made on an individual basis by the Department of Civil Engineering and will be communicated during the admissions process.
2. Students are expected to maintain a GPA of 2.6 each semester or be placed on probation. See the Probation Policy for master's students (<https://engineering.jhu.edu/civil/graduate-programs/masters-program/policies-and-procedures/>) for more details.

Combined Bachelor's/Master's Program

All Combined Bachelor's/Master's students must meet the requirements stipulated above for the respective MSE program (course-only or thesis program) with the following exception:

- The Department of Civil and Systems Engineering will accept one course from JHU undergraduate studies at the 400-level or above toward the course requirements listed above.

Notes:

1. Seminars, EN.500.603 Graduate Orientation and Academic Ethics and AS.360.624 Responsible Conduct of Research (Online)/AS.360.625 Responsible Conduct of Research courses are less than 3 credits each and do not count towards minimum course requirements.
2. Students are expected to maintain a GPA of 2.6 each semester or be placed on probation. See the Probation Policy for master's students (<https://engineering.jhu.edu/civil/graduate-programs/masters-program/policies-and-procedures/>) for more details.