CIVIL ENGINEERING, MS

Admission Requirements

Applicants for the master's of science program must hold a bachelor's degree from a program that is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology at the time of graduation, or provide evidence of an equivalent academic background to the Dean of the College of Engineering and Polymer Science and the appropriate department chair.

Applicants must submit official undergraduate transcripts, undergraduate grade point average, three letters of recommendation, and a statement of purpose. Personal statements or descriptions of post-baccalaureate experience that provide a rationale for proposed graduate study may also be submitted.

Applicants with a bachelor's degree must have an overall grade point average of 2.75 or better or 3.00 for the last two years (64 semester credits or equivalent).

Applicants whose native language is not English must have a TOEFL score of at least 79 on the internet-based TOEFL.

Degree Requirements

The University's Academic Requirements (See Academic Requirements in this Graduate Bulletin), the following college requirements and the department's academic requirements must all be satisfied for the master of science degrees in the College of Engineering and Polymer Science.

- Identify a three-member Advisory Committee including a major advisor before completion of 9 credit hours of coursework.
- Complete a formal Plan of Study that is acceptable to the Advisory
 Committee with a minimum of 24 credit hours of coursework of which
 no more than 6 credits are special topics courses. The formal Plan of
 Study may be revised upon approval of the Advisory Committee.
- Successfully (no "fail" votes) defend the thesis before the Advisory Committee, or have the Engineering Report approved by the Advisory Committee, or successfully complete the appropriate department's nonthesis option requirements.

Applicants with a bachelor's degree in a discipline other than engineering shall have completed coursework in calculus, differential equations, have one year of classical physics, and must select and complete undergraduate coursework from one of four undergraduate disciplines. These undergraduate engineering courses may be taken prior to graduate admission, or concurrently if the student has full admission or provisional admission, and is enrolled for at least 9 graduate credits.

| Code | Title | Hours |
|-------------|----------------------------------|-------|
| CIVE 306 | Theory of Structures | 3 |
| CIVE 313 | Soil Mechanics | 3 |
| MECE 310 | Fluid Mechanics I | 2 |
| CIVE 323 | Water Supply & Pollution Control | 3 |
| CIVE 341 | Hydraulic Engineering | 3 |
| CIVE 361 | Transportation Engineering | 3 |
| CIVE 401 | Steel Design | 3 |
| CIVE 403 | Reinforced Concrete Design | 3 |
| Total Hours | 23 | |

Areas of study in the department include structural mechanics, geotechnical, hydraulic, transportation, and environmental engineering.

Thesis Option

| Code | Title | Hours |
|---------------------------|-------|-------|
| Civil Engineering Courses | | 15 |
| Approved Mat | 3 | |
| Approved Elec | 6 | |
| Master's Thes | 6 | |
| Total Hours | 30 | |

Nonthesis Option

| Code | Title | Hours |
|----------------------------------|-----------|-------|
| Civil Engineering Courses | | 15 |
| Approved Mathematics or Sciences | | 3 |
| Approved E | Electives | 12 |
| Engineering Report | | 2 |
| Total Hours | 32 | |