The Master of Science in Electrical Engineering provides a quality graduate program offered within a small setting, where students get individual attention. The program can be pursued either full or part-time, and is designed to serve recent graduates and practicing engineers who need in-depth knowledge in the rapidly changing and expanding areas of electrical engineering beyond what can be included in the traditional bachelor’s program. The program offers the following areas of specialization:

- Microelectronics
- Systems
- Energy
- Computer Engineering

The degree can be completed with two options: thesis and non-thesis. The program with thesis option emphasizes research and requires submission of a thesis. This option requires the completion of 30 credits, 24 course credits and 6 thesis credits. The non-thesis option requires completion of 30 course credits and successful passing of a comprehensive examination. Students in non-thesis track usually complete the program in 18 months.

Internship and Co-ops are available to students. Some of the companies that our students have recently interned include IBM, General Electrical, Honda Research, and Central Hudson Gas and Electric.

**Admission Requirements**

- One official copy of all undergraduate and graduate course work. A bachelor’s degree in Electrical Engineering or a closely related field from an ABET-accredited program.
- A minimum undergraduate cumulative grade point average of 3.0.
- Three letters of recommendation attesting to the applicant’s aptitude and promise for graduate study.
- English competency according to College procedures and standards. These include a TOEFL score of 80 on the internet-based exam, or a score of 6.5 on the IELTS exam and satisfactory performance on the campus-designed and administered English proficiency examination.
Acceptable GRE Scores
On a case-by-case basis, applicants who do not meet all of the conditions for admission may be granted conditional admissions status. These students may register as non-matriculated students for courses of a preparatory nature following the guidance of the Department. They can be considered by the Graduate School for matriculation after this prescribed preparatory work is completed.

Program Requirements
- File a “plan of study” during the first semester after matriculation.
- Completion of prescribed course work and other requirements within seven years after matriculation.
- Maintain a cumulative average of 3.0 or better, with no more than two grades below B-.

Curriculum Requirements
For completion of the program and graduation, students must meet the following requirements:

Thesis Option / 30 credits
- Completion of 24 credits (all electives) of graduate courses.
- Completion of research and presentation of a thesis counting as 6 credits.

Non-Thesis Option / 30 credits
- Completion of 30 credits (all electives) of graduate courses.
- Successful passing of comprehensive examination.

Electrical Engineering Electives
Eight (thesis option) and ten (non-thesis option) courses are elected by the student from a list of the department graduate courses in electromagnetic fields and waves, telecommunications, electronics, computer and control systems depending on the students’ needs and interest.

The program does not require specialization in a concentration and the student under guidance of a graduate advisor may select courses of interest that will prepare him/her to pursue thesis or future work. Appropriate courses offered by cognate departments may be used to meet this requirement.

MS Thesis in Electrical Engineering
Research, writing and defense of a thesis under the guidance of the major professor.
Prerequisite: MS in Electrical Engineering candidate and PI.

Comprehensive Examination
Students with non-thesis option must pass a written comprehensive examination after completing their course work. This examination covers four subject matters based on the plan of study.

For course descriptions, please click COURSES.