Electrical Engineering M.S. Degree Program Requirements

All Program Requirements:

☐ 1. Minimum of 30 credits in engineering, mathematics, and/or science courses.

☐ 2. Minimum of 16 credits in formal graduate electrical engineering (ELE) courses, excluding ELE 601 and ELE 602.

☐ 3. Minimum of one credit of departmental seminar (ELE 601 and/or 602). Up to two credits of seminar may be used toward the 30 credit requirement.

☐ 4. At least two additional credits in formal graduate engineering, mathematics, and/or science courses.

☐ 5. Maximum of 12 credits of senior undergraduate (400-level) courses in engineering, mathematics, and/or science.


☐ 7. All full-time graduate students (M.S. or Ph.D.) are required to enroll in ELE 601 every semester the course offered.

Thesis Program:

☐ 8. Maximum of 6–9 credits of thesis (ELE 599). Standard is six credits; more than six credits requires thesis committee and Graduate Director/Department Chair approval.

Non-Thesis Program:

☐ 8. One of:

- ELE 598 Masters Project (practicum)
- written comprehensive exam (Ph.D. preparation)

Notes:

a. The Graduate School requires 18 formal course credits.
b. Programs cannot have more than 12 credits of thesis (ELE 599) and special problems (ELE 591/592/691/692) courses [section 7.44.1].
c. The ELE Graduate Affairs Committee must approve all 400-level courses to be counted toward the credit requirements.
d. Advanced part-time students may substitute ELE 602 (present one seminar) for ELE 601.
e. Graduate courses are numbered 500 and above; undergraduate courses are numbered 499 and below.
f. Courses below the 400-level do not fulfill any program requirements [section 9.12].
g. To fulfill credit requirements:
   i. a course grade of B- or higher is required in any 400-level course;
   ii. a course grade of C or higher is required in any 500- and 600-level courses.
1. Program of Study [section 7.43]
   A. specifies major professor (thesis: graduate faculty; non-thesis: Graduate Director)
   B. full-time student: submit no later than end of 3rd semester
   C. part-time student: submit no later than end of 4th semester
   D. Grad School form: different for thesis or non-thesis
   E. can be revised, but must match courses on transcript

2. Thesis Program
   A. Credit Requirements [section 7.44.1] (see page 1)
   B. Thesis Committee [section 7.44.15]
      i. “Masters Program Committee” = thesis committee
      ii. thesis committee = major professor, inside dept faculty, outside dept faculty
      iii. Grad School form “Establishment of a Masters Committee”
      iv. submitted with or before Program of Study
   C. Thesis Proposal [section 7.44.3]
      i. University’s required format
      ii. must be submitted during 1st or 2nd semester of research credits
      iii. must be submitted at least one semester before thesis is submitted/defended
      iv. human subjects: IRB approval; live animals: IACUC approval
      v. requires completed Responsible Conduct of Research (RCR) training [section 7.44.35]
      vi. Grad School form “Thesis Proposal Approval Form”
   D. Grad School “Thesis Format Guidelines”
   E. Grad School form “Request to Schedule an Oral Defense of a Masters Thesis”
   F. Oral Defense of Thesis [section 7.44.5]
      i. “Thesis Defense Committee” = thesis committee & outside member (chair)
      ii. 20 days before date of thesis defense: [section 11.23]
         • at least one unbound copy of thesis to Grad School (or, enough copies for committee members who want paper copy), plus a large envelope
         • receipt from Enrollment Services for the binding/microfilming fee
      iii. not less than 15 days before defense date: student gets copies from Grad School, distributes to committee [section 11.25]
      iv. student and major professor must be physically present
      v. only one committee member may attend electronically
      vi. no more than two hours long
      vii. unanimous approval of the committee is required for passing [section 8.42.3]
      viii. any interested observers may attend
   G. if needed: Grad School form “Certification that Mandatory Corrections were Made to a Successfully Defended Thesis” [section 11.28]

3. Non-Thesis Program [section 7.45]
   A. Credit Requirements [section 7.45.1] (see page 1)
   B. culminating experience [section 7.45.2], one of:
      i. Comprehensive Exam (mid-Spring semester, written, 4 hours, closed book, no notes)
      ii. ELE 598 Masters Project (one semester project)
4. Nomination for Graduation
   A. Grad School form: different for thesis or non-thesis
   B. usually due 3rd week of the graduation semester