ELECTRICAL ENGINEERING - 
MASTER OF SCIENCE (MS)

The Department of Electrical, Computer & Energy Engineering (ECEE) offers degree options tailored to both working engineers looking to advance their careers and to those looking to pursue a career in academia. Research is concentrated in six broad areas:

- optics, nanostructures and bioengineering
- communications and signal processing
- computer engineering
- dynamics and controls
- electromagnetics, RF and microwaves
- power electronics

For more information, visit the department’s Prospective Students webpage.

Distance Education

Students can take individual courses toward a master’s degree through distance education (online). For more information, connect with the graduate program advisor or visit CU Boulder Connect’s Master’s Programs webpage.

Concurrent Degree Program

BS/MS in Electrical Engineering or Electrical & Computer Engineering and Electrical Engineering

The concurrent BS/MS program enables especially well qualified electrical engineering or electrical & computer engineering majors to be admitted to the MS program during the junior year of their BS program, and to work simultaneously toward their BS degree along with an MS in electrical engineering. This program allows for early planning of the MS portion of the student’s education, taking graduate courses as part of the BS degree, more flexibility in the order in which courses are taken, and more efficient use of what would otherwise be a final semester with a light credit-hour load.

Requirements include a minimum 3.250 GPA for admission; 30 credit hours of course work (including thesis hours), at least 24 of which are from courses at the 5000 level or above; at least 18 credit hours are from sufficiently technical ECEN courses; and specific focus area requirements are met.

For more information, visit the department’s BS/MS Degrees webpage.

Requirements

All MS students must complete a total of 30 credit hours of course work (including thesis hours, if applicable) with a grade of C or better and a cumulative GPA of at least 3.00. At least 24 credit hours must be completed at the 5000 level or above, and at least 18 of those credits must be in sufficiently technical ECEN courses.

For more information, visit the department’s Master of Science webpage.

Degree Plans

Plan I: Thesis Option

Students must complete 4–6 credit hours of MS thesis. The total number of combined hours of independent study and thesis research shall not exceed 9 hours. The Plan I project culminates with an oral presentation and written thesis.

Plan II: Non-Thesis Option

A maximum of 6 credit hours of independent study can be used toward the 30-credit-hour requirement. No thesis is required, and there is no cumulative examination.

Time Limit

All degree requirements must be completed within four years of the date of commencing course work. Most students complete the degree in one to two years.