

Master of Science in Electrical Engineering program outline

The Electrical Engineering program requires 30 credits of graduate-level coursework. All courses are 3 credits unless otherwise noted.

Core courses

Required for all students (12 credits)

EE 410: Linear System Theory

EE 460: Stochastic Processes in Engineering

EE 481: Advanced Microelectronics Lab

EE 482: Advanced Communications and Antenna Lab

Elective Courses

Six required (18 credits)

EE 414: Modern Control Systems

EE 442: Microcomputer Operation and Design

EE 445: Computer Organization

EE 465: Digital Signal Processing

EE 471: Advanced Solid State Devices

At least two courses from the above list must be chosen. Other courses may be chosen from graduate level courses in EE/CS and an approved course from the Business Administration program.

Students should choose either the thesis or non-thesis option outlined below:

The non-thesis option requires 3 credits of EE 590: Project/Thesis.

Students should submit a well-documented report to the department.

The thesis option requires 6 credits of EE 590: Project/Thesis

The thesis shall be defended in an open forum. Three faculty members constitute a thesis committee with the thesis advisor as chair.

Students who opt to complete a thesis may select from posted research topics or proposed areas of interest of the faculty and submit a proposal of their thesis to the Department. Final decision of topic and advisor will be taken by the Department in accordance with Department guidelines. Ordinarily, these topics will touch on one or more of the following areas: Communication, Navigational Systems; Computers, Digital Systems; Microelectronics; Microwaves and Antennas; Power, Control Systems; Software Engineering. Some of the highly specialized and state-of-the-art laboratories available for students include Communications, Thick-Film Processing, Microelectronics, Microwaves, Antennas, Machines and Controls, Digital Design.

Both full- and part-time students are limited to a maximum of three thesis credits in any single semester. The minimum acceptable grade point average is 3.0.