Master of Science in Engineering

The student's program of coursework is selected with the advice of the graduate advisor and must be approved by the Graduate Studies Committee. All students must complete deficiency, core, and advanced-level courses. (Individual deficiency courses may be waived if the student has equivalent credit on entering the program.) The specific course requirements vary for each concentration.

At least one full year is required to complete the master's degree program.

Master of Science in Engineering with thesis. For students electing this option, 30 semester hours of credit are required, consisting of 24 hours of organized coursework and six hours in the thesis course. Students begin the program by completing deficiency courses, but they may petition to waive these courses if they have equivalent credit. Nine hours in core courses and nine to 15 additional hours in advanced-level courses must then be taken. A maximum of six hours of upper-division coursework may be counted toward the required 30 hours.

The student should choose a thesis research topic and begin research during the first semester.

Master of Science in Engineering with report. This option requires 33 semester hours of credit, consisting of 30 hours of organized coursework and three hours in the report course. The program must be approved by the graduate advisor. At least nine hours in core courses and an additional 15 to 21 hours of advanced-level coursework must be taken. Up to nine hours of upper-division coursework may be counted. Enrollment in this option must be approved by the graduate advisor.

Master of Science in Engineering without thesis or report. For students electing this option, 36 semester hours of coursework are required. Nine hours in core courses and an additional 18 to 24 hours in advanced-level courses must be taken. The program must be approved by the graduate advisor. Up to nine hours of upper-division coursework may be included. No research is required, but the level of academic performance is the same as that required for the master's degree with thesis.

Doctor of Philosophy

A student may choose to pursue the doctoral degree without first obtaining a master's degree. Before admission to doctoral candidacy, the student must have a master's degree in materials science and engineering or an equivalent amount of graduate credit and must have demonstrated satisfactory performance on each part of the doctoral qualifying process. The doctoral candidate must also pass preliminary and final oral examinations covering the research program and the underlying science and engineering upon which the research is based. For a student with a Bachelor of Science degree, at least three years are required to complete the Doctor of Philosophy degree program.