Requirements for a Minor in Electrical Engineering

1. A minor in electrical engineering can be earned through completion of 20 credits selected from among the ENG courses listed below.
2. No more than 8 credits from the student’s major degree program can be used to satisfy minor requirements.
3. Students are expected to obtain the necessary background (prerequisites or equivalents) to complete chosen courses in the minor program.
4. Students must have a declared major on record in order to apply for a minor in Electrical Engineering.
5. For the minor to be awarded, the grade point average (GPA) of the courses (20 credits) counted toward the minor must be 2.0 or greater.
6. The student’s application is subject to the approval of the Associate Chair for Undergraduate Studies of the Department of Electrical and Computer Engineering.
7. Students planning to pursue a minor in Electrical Engineering should apply as early as possible to facilitate course planning, and in no case later than October 1 of the senior year.

Courses that can be used to satisfy the requirements of the EE Minor*:

ENG EC 311- Logic Design
ENG EC 401- Signals and Systems
ENG EC 402- Control Systems
ENG EC 410- Electronics
ENG EC 412- Analog Electronics
ENG EC 414- Machine Learning
ENG EC 416- Digital Signal Processing
ENG EC 417- Electrical Energy Systems
ENG EC 450- Microprocessors
ENG EC 455- Electromagnetics I
ENG EC 456- Electromagnetics II
ENG EC 471- Physics of Semiconductor Devices
ENG EC 505- Stochastic Processes
ENG EC 516- Digital Signal Processing
ENG EC 520- Digital Image Processing and Communication
ENG EC 562- Engineering Optics
ENG EC 568- Optical Fibers and Waveguides
ENG EC 570- Lasers
ENG EC 583- Power Electronics
ENG EC 591- Photonics Laboratory
ENG EK 481- Intro to Nanotechnology
* Other 500-level courses by petition

Courses that are core requirements for the student’s major (i.e., not an elective or part of a restricted elective) may not be used to fulfill requirements for the EE minor.

Note: In each of the lists (1) and (2) below, students are expected to complete the course required for the major, where appropriate. The courses within each list overlap too much for both to be taken for credit, with one counted toward the major, and the other toward the minor:

(1) ENG ME 403, ENG ME 404, ENG BE 402, ENG EC 402
(2) ENG ME 303, ENG BE 436
(3) ENG ME 441, ENG ME 515
(4) ENG ME 501, ENG EC 501
(5) ENG EK 102, CAS MA 142, CAS MA 242
(6) ENG BE 401, ENG EC 401
(7) ENG ME 366, ENG EC 381, ENG EK 381, ENG BE 200
(8) ENG ME 460, ENG ME 560