

Technical Electives in Electrical Engineering

Technical electives are courses above and beyond the required courses that allow electrical engineering students to broaden or deepen their engineering knowledge in one or more technical areas. Students are required to complete four technical electives. Generally, allowable technical electives are any 400- or 500- level courses in Electrical and Computer Engineering (ECE), Mathematics (MTH), Mechanical Engineering (MNE), or Computer Science (CIS) except seminars, independent study, directed study, internship, or required courses within the program. Additional allowable courses are:

- ECE 367 Operating Systems
- ECE 350 Algorithms
- ECE 368 Digital Design
- PHY 341, 342 Modern Physics and Quantum Mechanics I, II
- PHY 441 Statistical Thermodynamics
- PHY 442 Elements of Solid State Physics
- MTH 311, 312 Advanced Calculus I, II
- MTH 332 Mathematical Statistics
- MTH 350 Applied Discrete Mathematics
- MTH 353 Applied Linear Algebra
- MTH 361, 362 Numerical Analysis I, II

Choices of technical electives must always be discussed with, and approved by, the student's academic advisor prior to enrollment. Some restrictions are:

1. At most two technical elective courses may be taken from outside the department of Electrical and Computer Engineering.
2. At most two technical elective courses may be taken at the 300-level.
3. The student must have the required prerequisites and/or co-requisites for each course.
4. Enrollment in 500-level courses requires a grade point average of at least 3.000, senior standing, and the written permission of the instructor.