MINOR IN ELECTRICAL ENGINEERING

The purpose of the Minor in Electrical Engineering is to give students in other fields of study a good basic background in electrical engineering. The 16-unit core provides an introduction to four basic areas of modern electrical engineering – basic electrical circuit theory, electronics, linear signals and systems, and digital logic and computer architecture. Elective courses provide opportunities for additional breadth or depth in a particular area. Students interested in the electrical engineering minor must meet with the program coordinator and complete the Electrical Engineering Minor Program Approval Form. Revision of the form requires the approval of the program coordinator.

Electrical Engineering Minor – 22 units

Prerequisite Requirements (23 units)
The minor is intended for students who have satisfied the following prerequisite requirements:

MATH 226  Calculus I  4
MATH 227  Calculus II  4
MATH 228  Calculus III  4
MATH 245  Elementary Differential Equations and Linear Algebra  3
PHYS 220 & PHYS 222  General Physics with Calculus I and General Physics with Calculus I Laboratory  4
PHYS 230 & PHYS 232  General Physics with Calculus II and General Physics with Calculus II Laboratory  4

The minor may be satisfied by a minimum of 22 units (not including prerequisite units) distributed as follows:

Core Requirements (16 units)
ENGR 205  Electric Circuits  3
ENGR 206  Circuits and Instrumentation Laboratory  1
ENGR 305  Linear Systems Analysis  3
ENGR 315  Systems Analysis Lab  1
ENGR 353  Microelectronics  3
ENGR 301  Microelectronics Laboratory  1
ENGR 356  Digital Design  3
ENGR 357  Digital Design Laboratory  1

Electives (6 units)
Approved upper division electrical engineering courses. No upper division course from the major can be double-counted toward meeting the elective requirements of the minor or second major. There must be prior approval from the program head.

To earn the Minor in Electrical Engineering, a student must complete at least 12 of the required 22 core and elective units at SF State. Each of the courses in the minor must be taken for a letter grade (CR/NC is not acceptable).