

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 Head of Electrical and Computer Engineering and complete the Electrical Engineering Minor Program Approval Form. Revision of the form requires the approval of the Program Head.

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 220/222	Physics I with Calculus (4)
Phys 230/232	Physics II with Calculus (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 Lab (1)
ENGR 305	Linear System Analysis (3)
ENGR 315	System Analysis Lab (1)
ENGR 353	Electronics (3)
ENGR 301	Electronics Lab (1)
ENGR 356	Basic Computer Architecture (3)
ENGR 357	Basic Digital Lab (1)

Electives

6 units

Approved upper division Electrical Engineering courses. No upper division course from the major can be double-counted towards meeting the elective requirements of the minor or second major. There must be prior approval from the program head.

Total **22 units**

To earn a minor in Electrical Engineering, a student must complete at least 12 of the required 22 core and elective units at SFSU. All courses in the minor must be taken with letter grades (CR/NC is not acceptable).

Along with this form ensure you submit "San Francisco State University Request for Change/Declaration of Undergraduate Minor" form to have signed by Director along with Unofficial SFSU Transcripts and a letter of interest.

March 5, 2020

**School of Engineering
San Francisco State University**

Electrical Engineering Minor Program Approval Form

Student name: _____ Major: _____

Address: _____

_____ Email: _____

_____ Telephone: _____

Prerequisite Courses	Units	Semester	Grade
Math 226 Calculus I	4		
Math 227 Calculus II	4		
Math 228 Calculus III	4		
Math 245 Elementary Differential Equations & Linear Algebra	3		
Phys 220/222 General Physics with Calculus I and Lab	4		
Phys 230/232 General Physics with Calculus II and Lab	4		
Core Requirements (16 units)			
ENGR 205 Electric Circuits	3		
ENGR 206 Circuits and Instrumentation Lab	1		
ENGR 305 Linear System Analysis	3		
ENGR 315 System Analysis Lab	1		
ENGR 353 Electronics	3		
ENGR 301 Electronics Lab	1		
ENGR 356 Basic Computer Architecture	3		
ENGR 357 basic Digital Lab	1		
Electives (6 units)			
Total (22 units)			

Program Head Approval: _____ Date: _____

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March 5, 2020