

**Minor in Computer Engineering**

The purpose of the minor in Computer Engineering is to give students who are interested in the computer technology a good basic knowledge in software development, digital electronics, computer organizations, and microprocessor applications. Additional knowledge in computer networks, multimedia systems, real-time systems, etc. may be required through electives. Students interested in the Computer Engineering minor must meet with the Program Head of Electrical and Computer Engineering and complete the Computer Engineering Minor Program Approval Form. Revision of the form requires the approval of the Program Head.

The minor in 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	General Physics with Calculus I & Lab (4)
Phys 230/232	General Physics with Calculus II & Lab (4)
CSC 210	Introduction to Computer Programming (3)
CSC 212	Introduction to Software Development in Unix (2)

The minor may be satisfied by a minimum of 21 units (not including prerequisite units) distributed as follows:

Core requirements	.....	15 units
CSC 213	Fundamental of Computer Science (3)	
ENGR 205	Electric Circuits (3)	
ENGR 206	Circuits and Instrumentation Lab (1)	
ENGR 356	Basic Computer Architecture (3)	
ENGR 357	Basic Digital Lab (1)	
ENGR 478	Design with Microprocessors (4)	
Electives	.....	6 units
Approved upper division Computer Engineering courses, No upper division course from major can be double-counted towards minor or second major.		
<b>Total (not including prerequisites units)</b>	<b>.....</b>	<b>21 units</b>

To earn a minor in Computer Engineering, a student must complete at least 12 of the required 21 core and elective units at SFSU. All courses in the minor must be taken with letter grades (CR/NC is not acceptable).

**School of Engineering  
San Francisco State University**

Computer Engineering Minor Program Approval Form

Student name: \_\_\_\_\_ Major: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_ Email: \_\_\_\_\_

\_\_\_\_\_ Telephone: \_\_\_\_\_

<b>Prerequisite Courses</b>	<b>Units</b>	<b>Semester</b>	<b>Grade</b>
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 & Lab	4		
Phys 230/232 General Physics with Calculus II & Lab	4		
CSC 210 Introduction to Computer Programming	3		
CSC 212 Introduction to Software Development in Unix	2		
<b>Core Requirements (15 units)</b>			
CSC 213 Fundamentals of Computer Science	3		
ENGR 205 Electric Circuits	3		
ENGR 206 Circuits and Instrumental Lab	1		
ENGR 356 Basic Computer Architecture	3		
ENGR 357 Basic Digital lab	1		
ENGR 478 Design with Microprocessors	4		
<b>Electives (6 units)</b>			
<b>Total (21 units)</b>			

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_