MINOR IN CIVIL ENGINEERING

The purpose of the Minor in Civil Engineering is to give students with sufficient background in mathematics, physics, and chemistry, a fundamental understanding of the field of civil engineering. The minor should be of special interest to students in geosciences (foundations and earthquake), environmental studies, physics, mathematics, computer science, and other engineering fields. Students interested in the Civil Engineering minor must meet with the program coordinator and complete the Civil Engineering Minor Program Approval Form. Revision of the form requires the approval of the program coordinator.

All coursework used to satisfy the requirements of the minor must be completed with a minimum grade point average of 2.0.

Civil Engineering Minor — 21 units

Prerequisite Requirements (21 units)

The minor is intended for students who have satisfied the following prerequisite requirements.

Code	Title	Units
MATH 226	Calculus I	4
MATH 227	Calculus II	4
PHYS 220 & PHYS 222	General Physics with Calculus I and General Physics with Calculus I Laboratory	4
PHYS 240 & PHYS 242	General Physics with Calculus III and General Physics with Calculus III Laboratory	4
CHEM 115	General Chemistry I: Essential Concepts of Chemistry	5

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

Core Requirements (15 units)

Code	Title	Units
ENGR 102	Statics	3
ENGR 201	Dynamics	3
ENGR 235	Surveying	3
ENGR 304	Mechanics of Fluids	3
ENGR 309	Mechanics of Solids	3

Electives (6 units)

Approved upper division civil engineering courses, all within one of the civil engineering focus areas. 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 Civil Engineering, a student must complete at least 12 of the required 21 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).