

# Coursework Requirements

## Required Courses

ENGR 800	Engineering Communication	3
ENGR 801	Engineering Management	3
ENGR 833	Principles of Earthquake Engineering	3
ENGR 836	Structural Design for Earthquakes	3

## Option A

ENGR 897	Research	3
ENGR 898	Thesis	3

## Option B

ENGR 895	Applied Research Project	3
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<b>Engineering Electives<sup>1</sup></b>	<b>6-15</b>
<b>Non-Engineering Electives<sup>2</sup></b>	<b>0-6</b>
<b>Minimum Total</b>	<b>30 units</b>

## 1. Engineering Electives:

ENGR 425*	Reinforced Concrete Structures (3)
ENGR 426*	Steel Structures (3)
ENGR 427	Wood Structures (3)
ENGR 431	Foundation Engineering (3)
ENGR 461	Mechanical and Structural Vibrations (3)
ENGR 823	Introduction to Seismology (3)
ENGR 826	Seismic Hazards Analysis (3)
ENGR 827	Structural design for Fire Safety (3)
ENGR 828	Base Isolation (3)
ENGR 829	Advanced Topics in Structural Engineering (3)
ENGR 831	Advanced Concrete Structures (3)
ENGR 832	Advanced Topics in Seismic Design (3)
ENGR 835	Advanced Steel Structures (3)
ENGR 837	Geotechnical Earthquake Engineering (3)
ENGR 838	Smart Structures Technology
ENGR 897	Research (3)
ENGR 899	Special Study (3)

Note: International Students have one semester of the grace period, after completion of their course work, not including the ENGR 895 or ENGR 898, to request a Reduced Course Load (RCL) with zero units. After this grace period, they will be required to register for 3 units in engineering. Students should speak to an International Student Advisor at OIP if they wish to request an RCL with zero units.

\* Only one of these courses may be taken as part of graduate program.

## 2. Non-Engineering Electives

Courses selected primarily from sciences, mathematics, social science, or business, upon approval of the graduate coordinator.

a. Elective courses must not duplicate subjects used in satisfying the student's undergraduate degree requirement.

b. A program cannot contain more than 9 units of courses with course number below 700 and higher than 400.

### Minimum Prerequisites for conditionally accepted graduate student with a B.S. degree in a program other than Civil or Structural Engineering:

MATH:	MATH 226, 227, 228, 245
PHYS:	PHYS 230/232, 240/242
CHEM:	CHEM 115
ENGR:	ENGR 102, 201, 309, 323, 430, 425, 426 (One of the 425 or 426 may be used for graduate credits)