

**STRUCTURAL ENGINEERING COURSE PREREQUISITES:
ALL COURSES MUST BE TAKEN FOR A LETTER GRADE**

REQUIRED COURSES	
CHEM 6A	See UCSD General Catalog
MATH 20A	See UCSD General Catalog
MATH 20B	See UCSD General Catalog
MATH 20C	See UCSD General Catalog
MATH 20D	Math 20C
MATH 18 (formerly Math 20F)	Math 3C or Math 4C or Math 10A or Math 20A
MATH 20E	Math 20C and Math 18
PHYS 2A	Math 20A concurrent with Math 20B
PHYS 2B	Phys 2A, Math 20A-B, concurrent with Math 20C
PHYS 2BL	Phys 2A, concurrent with Phys 2B
PHYS 2C	Phys 2A, 2B, Math 20A-C, concurrent with Math 20D
PHYS 2CL	Phys 2A and Phys 2B, concurrent with Phys 2C
SE 1 Introduction to Structures and Design	SE Major
SE 3 Graphical Communication for Eng. Design	SE 1
SE 9 Algorithms and Programming	Math 20D and Math 18
SE 101A Mechanics I: Statics	Math 20C and Phys 2A
SE 101B Mechanics II: Dynamics	SE 101A (or MAE 130A)
SE 101C Mechanics III: Structural Dynamics	Math 18 and SE 101B (or MAE 130B)
SE 102 Intro to Computing for Engineers (new SE 121A)	SE 9 and SE 101A (or MAE 130A)
SE 105 Structural Materials (new SE 104/104L)	SE 1 and SE 101A (or MAE 130A)
SE 110A Solid Mechanics I	Math 20D and SE 101A (or MAE 130A)
SE 110B Solid Mechanics II	C- or higher in SE 110A
SE 115 Fluid Mechanics	Phys 2A and Math 20D
SE 125 Statistics, Probability and Reliability	Math 20D and Math 18
SE 130A Structural Analysis I	C- or higher in SE 110A
SE 130B Structural Analysis II	C- or higher in SE 130A
SE 131A Finite Element Analysis (new SE 131)	Coreq: SE 130B
SE 131B Computing Projects in SE (new SE 121B)	SE 131A (or SE 131), SE 101C (or MAE 130C) , SE 130B

REQUIRED COURSES CONTINUED...	
SE 140A Design of Civil Structures I	SE 130B and SE 150
SE 140B Design of Civil Structures II	SE 140A, SE 151A and SE 181
SE 143A Aerospace Structural Design I	SE 3, SE 142 and SE 160B
SE 143B Aerospace Structural Design II	SE 143A

FOCUS SEQUENCE AND SE TECHNICAL ELECTIVE COURSES	
SE 103 Conceptual Structural Design	SE 9, SE 101A (or MAE 130A), SE 104, and SE 104L
SE 142 Design of Composite Structures	SE 110A and SE 110B
SE 150 Design of Steel Structures	SE 130A
SE 151A Design of Reinforced Concrete	SE 103 and SE 130A
SE 151B Design of Prestressed Concrete	SE 151A
SE 154 Timber Design	SE 103 and SE 130A
SE 160A Aerospace Structural Design	SE 105 (or MAE 21 or SE 104L) , SE 101B (or MAE 130B or MAE 30B), and SE 110A (or MAE 131A)
SE 160B Aerospace Structural Design	SE 160A
SE 163 Nondestructive Evaluation and Design	SE 110A and SE 110B
SE 164 Sensors & Data Acquisition for SE	SE 101C (or MAE 130C) and SE 110A
SE 165 Structural Health Monitoring	SE 101C (or MAE 130C)
SE 167 Signal Processing & Spectral Analysis for SE	SE 101C
SE 168 Struct. System Testing and Model Correlation	SE 101C (or MAE 130C) and SE 131A (or SE 131)
SE 171 Aerospace Structures Repair	SE 160A
SE 180 Earthquake Engineering	C– or higher in SE 110A and SE 130A
SE 181 Geotechnical Engineering	C– or higher in SE 110A (or MAE 131A)
SE 182 Foundation Engineering	SE 181
SE 184 Ground Improvement	SE 181

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