

A.R.E. Review Workshop General Structures & Lateral Forces

Presented by David Thaddeus, AIA
Associate Professor, UNC-Charlotte
"The Structures Guru..."

Schedule Overview

Friday

9:00 AM – 1:30 PM

Seminar Introduction
Review of Trigonometry
Forces: General Definitions
 Force Resolution
 Force Addition
Moments and Couples
Stresses and Strain / Hooke's Law

2:30 PM – 7:00 PM

Free Body Diagrams
Equilibrium, Loads and Reactions
Truss Analysis: Method of Joints
 Method of Sections

Saturday

8:00 AM – 1:30 PM

Tributary Load Analysis
Geometry of Sections
General Beam Design Theory

2:30 PM - 5:30 PM

Load, Shear and Bending Moment Diagrams
Design of Structural members in Wood and Concrete

5:30 PM - 8:00 PM

Review of General Structures Mock Exams (**mandatory session**)

Sunday (Lateral Forces)

8:00 AM - 1:30 PM

Design of steel members
Selection of structural systems
Foundation Systems
General Lateral Load- Resisting Strategies

2:30 PM - 7:00 PM*

Wind Loads
Seismic Loads
Lateral forces Mock Exam

***Candidates taking General Structures ONLY do not need to attend this session**