



# A.R.E. Structure Seminar

Presented  
by

**Professor David J. Thaddeus, AIA, NCARB**  
College of Architecture University of North Carolina at Charlotte

October 22, 23 & 24, 2010

*School of Architecture at the University of Miami  
The Jorge M. Perez Architecture Center Glasgow Hall  
1215 Dickinson Drive - Coral Gables, FL 33146*

**SPACE IS LIMITED** - Registration for Full Seminar

Special Introductory Price for early registration prior to September 17, 2010  
Cost includes registration fee of \$75.00

Members \$300.00 Non-Members \$375.00

Registration September 18, 2010 – October 15, 2010

Members \$350.00 Non-Members \$425.00

Registration after October 16, 2010

Members \$400.00 Non-Members \$500.00

***For those individuals who register for the TWO programs – Mechanical and Electrical Seminar on August 13, 14, 15 and the ARE Structure Seminar on October 22, 23 & 24 will receive AN ADDITIONAL 10% discount***

**Cancellation Policy: No Refunds**

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**REGISTRATION FORM:** For further information, contact AIA Miami office at (305) 448-7488

Name: \_\_\_\_\_ **AIA Member No.** \_\_\_\_\_

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[www.aiamiami.com](http://www.aiamiami.com)



**A.R.E. Structures Seminar**  
Professor David Thaddeus, AIA, NCARB

(Please bring colored pencils or pens to all sessions)

**Friday, October 22<sup>nd</sup>**

**1:00 P.M. - 9:00 P.M.**

**1:00 P.M. – 4:30 P.M.** (15 minutes break as needed)

- Overview of structural systems
- Gravitational and Lateral Forces
- Forces: General Definitions, Force Resolution, Force Addition

**4:30 P.M. - 9:00 P.M.** (15 minutes break as needed)

- Moments and Couples
- Free Body Diagrams
- Equilibrium, Loads and Reactions

<b>RED</b>	:	<b>COMPRESSION</b>
<b>BLUE</b>	:	<b>TENSION</b>
<b>GREEN</b>	:	<b>SHEAR</b>
<b>PURPLE</b>	:	<b>BENDING</b>
<b>BROWN</b>	:	<b>DEFLECTION</b>

**Saturday, October 23<sup>rd</sup>**

**8:00 A.M. - 8:00 P.M.**

**8:00 A.M. – 1:30 P.M.** (15 minutes break as needed)

- Truss Analysis : Method of Joints  
Method of Sections
- Stresses and Strain / Hooke's Law
- Tributary Load Analysis
- Structural Vignette for ARE 4.0 (this presentation is contingent on seminar progress)
- Geometry of Sections

**1:30 P.M. – 2:30 P.M. Lunch (on your own)**

**2:30 P.M. - 5:30 P.M.** (15 minutes break as needed)

- General Beam Design Theory
- Load, Shear and Bending Moment Diagrams
- General Design of Structural members in Bending

**5:30 P.M. - 8:00 P.M.** (15 minutes break as needed)

- Structural Systems Mock Exam **(Please do not miss this session)**

**Sunday, October 24<sup>th</sup>**

**8:00 A.M. - 7:00 P.M.**

**8:00 A.M. - 1:30 P.M.** (15 minutes break as needed)

- Design of steel members
- Selection of structural systems
- Foundation Systems

**1:30 P.M. – 2:30 P.M. Lunch (on your own)**

**2:30 P.M. – 7:00 P.M.** (15 minutes break as needed)

- General Lateral Load- Resisting Strategies
- Wind Loads
- Seismic Loads
- Lateral forces Mock Exam