

EXTREME^{3.1} LOADING[®] FOR STRUCTURES

Training Outline

	8am - 10am	10:15am - 12pm	1pm – 3pm	3:15pm – 5pm
Day 1	<ul style="list-style-type: none"> • Introduction to Applied Element Method (AEM) • FEM-AEM Comparison • Use of Traditional FEM Techniques for Progressive Collapse Analysis 	<ul style="list-style-type: none"> • Definition of Progressive Collapse • Historical progressive Collapse Cases Studies • Design philosophy for progressive collapse mitigation 	<ul style="list-style-type: none"> • Introduction to ELS • Modeling Concrete Structures in ELS <ul style="list-style-type: none"> ○ Integrity Check ○ Reinforcement Bars ○ Extensions ○ Pre-stressed concrete 	<ul style="list-style-type: none"> • Modeling of Concrete Structure <ul style="list-style-type: none"> ○ Viewing the results at the Viewer ○ Check Spring Material • Advanced Modeling <ul style="list-style-type: none"> ○ Creating holes ○ Creating cracks ○ Check Stability
Day 2	<ul style="list-style-type: none"> • UFC 2009 and GSA 2003 procedures for progressive collapse analysis: <ul style="list-style-type: none"> ○ Alternate Path Method ○ Tie Force Method 	<ul style="list-style-type: none"> • Modeling Steel Structures for Progressive Collapse • Modeling & Analyzing UFC Examples Using ELS I 	<ul style="list-style-type: none"> • Loading Options using ELS <ul style="list-style-type: none"> ○ Seismic Loading ○ Staged Loading ○ Staged Construction ○ Moving Loads ○ Pressure Loading ○ Hydrostatic Pressure 	<ul style="list-style-type: none"> • Advanced Modeling using ELS <ul style="list-style-type: none"> ○ Regions ○ Spring Control ○ Corrosion ○ Intermediate Hinges ○ Interface ID
Day 3	<ul style="list-style-type: none"> • Introduction to Blast Loads • Blast Loading using ELS <ul style="list-style-type: none"> ○ Automated ○ Advanced Loading 	<ul style="list-style-type: none"> • Modeling of CFS Structure • Conclusion • Course End 	--	--

* AM coffee break (15 min), Lunch (1 hour), PM coffee break (15 min)

