



**ASME San Diego Section Presents  
A One-day Career Development Course:  
Introduction to Solid Works CAD and Finite Element Analysis (FEA)**

- When:** Saturday, April 21, 2018. 8:00 am to 4:00 pm. Please arrive by 7:30 am.  
**Where:** SCST Conference Room, 6280 Riverdale St, San Diego, 92120  
**Instructors:** James B. Powell, P.E., [James1024512@gmail.com](mailto:James1024512@gmail.com)  
Phil Sluder, TriAxial Design and Analysis, Inc. [sluder@triaxialdesign.com](mailto:sluder@triaxialdesign.com)
- Text:** Handouts Provided for Lecture Material  
**References:** Schaum's Outline, Finite Element Analysis, George R. Buchanan  
Software, Visual FEA/CBT V1.0
- Cost:** \$80 for ASME Members; \$30 for ASME Student Members; \$120 for Others.  
Lunch and refreshments included. \$20 extra if paid on day of class.
- Cancellation:** Full refund if canceled by San Diego Section or 7 calendar days before, 75% refund if canceled 3 calendar days before, no refund after that date.

**Course Content:**

**Ten Essentials You Must Understand to Use SolidWorks Effectively** - We'll discuss the ten essentials of SOLIDWORKS; not just beginner topics, but concepts and tools inside SOLIDWORKS that will help you excel at your day to day projects. Increase your productivity and work the way the tools were intended. Here's a list of ten essentials you must understand to use SOLIDWORKS effectively:

- |                                     |   |
|-------------------------------------|---|
| ✓ File Management                   | ✓ Display States / Configurations               |
| ✓ FeatureManager Design Tree        | ✓ Multiple Body Parts                           |
| ✓ Templates (and Sheet Formats)     | ✓ Custom Properties and BOMs                    |
| ✓ Two Dimensional Sketching         | ✓ Bottom Up / Top Down, and In-Context Features |
| ✓ Design Intent                     |   |
| ✓ Constraints (Relations and Mates) |   |

- 1) Introduction to finite difference method, Variational Mechanics, and FEA Method
- 2) FEA, element formulations, energy methods

**Education Level:** The two courses assume basic understanding of CAD and Strength of Materials, Materials Science, Thermodynamics, and Heat Transfer

**REGISTRATION FORM—INTRO TO SOLIDWORKS AND FEA  
SATURDAY, APRIL 21, 2018**

Name _____	Phone _____
Address _____	Check One:
_____	ASME Member (\$80) _____
_____	ASME Student Member (\$30) _____
Email _____	Other (\$120) _____
	Amount Enclosed _____ (no cash please)

Mail to: ASME San Diego Section, c/o York Lew, 8215 Thimble Ct, San Diego, CA 92129  
Mail by: April 8 to assist with logistics