



ASME/ISA LI Sections Technical Meeting and Seminar

## Effectively Integrating FEA into the Design Process

Dr. Nicholas M. Veikos, President, CAE Associates

Farmingdale State College – Lupton Hall, Room T101

Wednesday, October 22, 2014

**6:00 PM:** Sign-In, Refreshments and Networking

**6:30 PM to 8:30 PM:** Presentation and Q&A

**Cost:** Attendance is free of charge for all attendees, and includes light refreshments. There is, however, a cost if you wish to obtain PDH credits. See next.

**PDH Credits:** ASME has approved this seminar for two Professional Development Hour (PDH) credits. ASME will issue a two-credit certificate to attendees who pay a \$35 processing fee. Please state when you register that you wish to receive the PDH credits and bring a check, made out to ASME Long Island Section, to the seminar.

**Registration:** Please register by contacting Jeffrey Piccolo at [jeffreypiccolo1@gmail.com](mailto:jeffreypiccolo1@gmail.com). Please provide your name, daytime phone number, company and society affiliation, and whether you are applying for PDH credits.

**Directions:** For general directions to the campus, see <http://www.farmingdale.edu/about/directions.shtml>  
For directions to Lupton Hall, Room T101, see annotated map on next page.

### Program Description

The notion that adopting finite element analysis (FEA) early in the design process can provide significant benefits to product development has been proven. The question that many businesses are asking is, "Will it work for us?"

Companies use simulation software with mixed results. Some achieve resounding success and serve as exemplars for the industry. Others fail miserably, vowing never to sway from the build-and-test philosophy. In most cases, the differences lie in planning and commitment to execution.

In this presentation, CAE Associates will discuss the following topics:

- Where does FEA fit in the design process?
- What are some implementation best practices?
- Understanding the return on investment.
- How to best integrate CAD and FEA.
- How to control the quality of the outcome.
- What are the important factors to consider for successful integration?

### About the Presenter



Dr. Nicholas M. Veikos is the president of CAE Associates, an engineering consulting firm in Middlebury, CT specializing in finite element analysis (FEA) and computational fluid dynamics (CFD). Nick has over 30 years of experience performing and supervising engineering analysis in a wide variety of engineering disciplines. During this time, Nick has also helped many organizations successfully implement engineering simulation in order to develop better processes and build superior products.

**Education:** Dr. Veikos received his formal engineering education at Columbia University, earning an Eng.Sc.D. in Mechanical Engineering along with Master of Science and Bachelor of Science degrees in Mechanical Engineering.

# Farmingdale State College

## State University of New York

2350 Broadhollow Road, Farmingdale, NY 11735-1021

### Map of the Campus

Locate buildings by name (in Latin Hall) number (00), or map grid coordinates (D-5).

Admissions (Luffin Hall) (00)	D-5
Alumni Hall (65)	E-5
Aviation Center ("Passes see view)	E-3
Bookstore (10)	0-2
Bus Stop, Main	F-3
Campus Center (06)	F-3
Campus Commons (06)	F-3
Children's Center (33)	0-6
Conklin Hall (12)	E-3
Cuffler Hall (03)	F-4
Dewey Hall (91)	E-6
Greerson Hall (07)	E-3
Greenhouse (04)	F-4
Greenway Library (18)	D-4
Hale Hall (14)	D-3
Health & Wellness Center (89)	E-6
Heating Plant (71)	E-2
Hicks Hall (06)	F-4
Hooper Hall (16)	E-5
Horton Hall (54)	F-3
Hughes Hall (93)	F-5
Knapp Hall (40)	D-4
Luffin Hall (02)	D-5
Lehman Hall (62)	F-6
LIBR Shuttle	D-5
Lupton Hall (68)	C-4
Memorial Hall (69)	D-5
Nold Hall (65)	D-5
Orchard Hall (15)	F-7
Roosevelt Hall (42)	C-4
School of Business Building (116)	E-5
Service Building (70)	E-2
Snodder Hall (94)	F-5
Smith Hall (90)	E-5
Student Services (Luffin Hall) (02)	D-5
The Cottage (01)	F-5
Thompson Hall (41)	F-4
University Police (46)	0-3
Ward Hall (11)	E-4
Whitman Hall (50)	E-4
University Police	631-420-3111
Campus Operator	631-420-2000
Office of Admissions	631-420-2288

- Directions to the campus via Automobile —**
- Northern State Parkway: Exit 40S — Route 110. Travel south approximately 3 miles.
  - Long Island Expressway (495): Exit 49 South — Route 110. Travel south approximately 2 miles.
  - Southern State Parkway: Exit 32N — Route 110. Travel north approximately 3 miles.
- All vehicles parked on campus must have a valid parking permit. Please go to University Police to obtain a permit.*
- Directions to the campus via the Long Island Railroad —**
- Rorhokoma branch to the Farmingdale Station. Shuttle Bus service is available to the campus from the train station.

\*The Farmingdale State Aviation Education Center is located at Republic Airport, approximately 1.5 miles south of the campus, at 895 Broadhollow Road (Rte 107) Farmingdale, NY 11735.

Last updated 12-31-13  
TO GOLF DRIVING RANGE & SBQC CONFERENCE CTR  
"SEE MAP BELOW"

**LEGEND**

ADA PARKING



Park Here,  
Walk to  
Entrance

Turn  
Here

Enter Lupton Hall Here  
(T1101 is immediately on Right)

Enter Campus Here  
(Melville Road Entrance)

