

# APPLYING THE VEE MODEL



A One Day Tutorial -- May 13, 2000

**Instructor: Dr. Kevin Forsberg**

A good process model is essential to the effective application of System Engineering in managing projects. This tutorial provides understanding of and practice in the use of the VEE model, which over the past decade has proven to be one of the most robust and broadly applicable models available. This tutorial is given as a workshop that is focused on implementation, and it will provide the attendees with conceptual tools that they can apply on the job.

## WHAT'S IN THIS TUTORIAL:

### **Session 1 - Introductions and Expectations**

- Team triad exercise (introductions, experience, expectations for workshop)
- Report by triad

### **Session 2 - Background**

- System Engineering and Project Management interaction – A tie to the first tutorial of the series
- Discuss the importance of SE and PM synergism – A tie to the first tutorial

### **Session 3 – Importance of Models**

- Present and discuss CSM Project Management model, model derivation (Four Essentials), discuss three aspects of the project cycle (“Ship of Gold” and other examples). Teams discuss each aspect and participant experiences with each

### **Session 4 - The Technical Aspects of the Project Cycle (the Vee)**

Discuss Vee derivation, introduce off-core concepts. Discuss opportunity and risk identification.

### **Session 5 – Use of the Vee Model for COTS and NDI (and Better, Faster, Cheaper)**

Discuss concepts by defining COTS and NDI; Teams discuss appropriate use. Define Better, Faster, Cheaper; Teams discuss where/when these ideas must be used.

### **Session 6 - SE and PM vocabulary and relationship to the Vee model**

### **Session 7 - Introduce concept of control gates**

### **Session 8 - Summary**

Revisit expectations  
Evaluation forms

Date: **May 13, 2000**

Time: 8 a.m. to 5 p.m. (includes an hour for lunch; lunch is provided)

Place: San Jose State University, Engineering Building Auditorium

Cost: Space is limited. Enrollment deadline is May 5

|                     | INCOSE<br>Member | Non-<br>Member | Non-Member<br>plus<br>Membership * |
|---------------------|------------------|----------------|------------------------------------|
| Registration        |                  |                |                                    |
| This Session only   | <b>\$150</b>     | <b>\$200</b>   | <b>\$225</b>                       |
| The Series of three | <b>\$360</b>     | <b>\$410</b>   | <b>\$435</b>                       |

(Fee for parking on campus is not included)

(\*Reminder - Non-members can enroll at the member's rate by including the membership fee. Membership good to June 2001. Membership is \$100.)



San Francisco Bay Area Chapter  
Read about our chapter activities and  
this tutorial series at  
<http://www.incose.org/sfbac>

**ENROLLMENT AND  
CONTACT INFO ON BACK**

## About the Instructor

**Dr. Kevin Forsberg** draws on 27 years of experience in System Engineering, Project, and Proposal Management and sixteen years of successful consulting to both government and industry. His experience ranges from research projects, to development efforts, through to full-scale production implementation. Training and consulting have been provided to many organizations including AT&T, Lucent, GTE, SAIC, TRW, Lockheed-Martin, Chiron, CIA, NASA, and other government agencies.

Dr. Forsberg is co-founder of the Center for Systems Management (CSM) and a second company, Visual Management Systems (VMS). He is co-author of a book, *Visualizing Project Management*, J. Wiley & Co., 1996, and has over forty published articles in referred journals.

*Awards:* Fellow, American Society of Mechanical Engineers, NASA Public Service Award, for outstanding contribution to the Space Shuttle Program, Agency Seal Medallion, CIA, for pioneering effort in project management training

*Education:* Ph.D., Engineering Mechanics, Stanford University, M.S., Engineering Mechanics, Stanford University  
B.S., Civil Engineering, Massachusetts Institute of Technology

## INFORMATION

**Pre-Registration is Required.** Fill out and return the enrollment form provided. Acceptable forms of payment are checks, bank drafts, and money orders (sorry, no purchase orders or credit cards). Fees are payable to INCOSE. To "reserve" a space in the tutorial when paying by company check, remit a personal check and attach a note to hold for company payment. Pre-registration ends **May 5**.

**Late Registration.** Enrollment forms postmarked after **May 5** will be treated as Late Registration. Late Registration received prior to **May 12** will require a \$15 late fee. Late registration received on **May 12** and walk-ins on **May 13** will require a \$30 late fee. Late registrants are not guaranteed handouts at the beginning of the tutorial. We will attempt to make handouts available during the day of the tutorial.

**Confirming Enrollment** Call 650-938-0553 if enrollment confirmation is not received by **May 9**.

**Enrollment Packets** A confirmation notice will be in the enrollment information package. A map to San Jose State and the auditorium will be provided as well as parking information and a phone number to be used in an emergency. Course material will be distributed on the day of the tutorial at the registration desk. Registration begins at 8 a.m. The course is scheduled to end at 5 p.m.

**Lunch is Provided** A one hour lunch break is scheduled. Lunch will be provided and the entree will be a selection of sandwiches with various meats and cheeses. Please list dietary restrictions on the enrollment form.

**Cancellation Policy** Full refunds will be made prior to **May 5**. The registration fee will also be refunded if the tutorial must be cancelled or rescheduled due to circumstances beyond our control.

**Event Coordinator** Ms. Linda Howell of *SERVICE PLUS* provides event operations support. Enrollment status and changes should be given to **SERVICE PLUS 408.257.5501** or [incose@svcplus.com](mailto:incose@svcplus.com)

**For Information about INCOSE Tutorials:** **Barney Morais, 408.720.8431, [bgmorais@ieee.org](mailto:bgmorais@ieee.org)**

✂ ----- complete and mail ----- ✂

### Enrollment Form for APPLYING THE VEE MODEL (Postmark by May 5)

Name \_\_\_\_\_ (for Certificate of Completion) \_\_\_\_\_

Mailing Address \_\_\_\_\_

Position \_\_\_\_\_ Company \_\_\_\_\_

Day Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

Remarks/Request \_\_\_\_\_

|                                   |                  |                |                                |  |
|-----------------------------------|------------------|----------------|--------------------------------|--|
| <i>Circle the amount enclosed</i> | INCOSE<br>Member | Non-<br>Member | Non-Member<br>plus Membership* | <i>Mail completed form and fee<br/>(made out to INCOSE) to:</i><br>SERVICE PLUS<br>SFBAC Tutorial<br>P.O. BOX 2610<br>Cupertino, CA 95015-2610 |
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