



SEER for Software Workshops

CORE

This three-day workshop provides attendees with a complete methodology to develop and evaluate resource estimates for software development and maintenance projects. The workshop covers the basic functions of gathering and assessing inputs such as software size, people, process and product in order to develop an estimate of project budget, staffing, schedule and risk. We walk you through a structured process with presentation, discussion and extensive "hands-on" experience, showing you how to make use of the many features of SEER for Software to increase reliability, traceability and efficiency.

Each student has a working partner for optimum learning, and we provide a comfortable, highly effective, technically up-to-date learning environment. The instructors don't just teach; they are actual practitioners and consultants with extensive experience as well as intimate knowledge of the applications. Instructors augment the training with 'lessons learned' from actual use of the model and demonstrate ways to use the model for simple and efficient analysis - things that cannot be learned from just reading the manual! Students can learn tactics on how to use the model to improve the efficiency of cost proposals, as well as benchmark and cross-check in order to allow for maximum return on investment. Also, students will gather valuable perspective on how the model has been used by many other organizations under a variety of environments and circumstances.

Audience:

This course is designed for:

- Project managers
- Cost estimators
- Development engineering staff
- Acquisition Professionals
- Systems engineers

Upon completion of the class, users will be able to:

- Determine optimum, achievable plans based on estimates
- Substantiate estimates and their basis
- Establish and Optimize total ownership costs
- Make decisions regarding cost, schedule, reliability
- Quantify risk and risk management approaches
- Estimate budget, staffing and schedule
- Estimate risk

SEER for Software Core Course Outline

Day One

1. Understand foundation concepts & issues that govern project estimation & analysis
2. Learn the empirical basis of the mathematics, process, and inputs within SEER models
3. Learn the SEER model basic equation and flow of data through the model
4. Learn how to navigate through SEER model user interfaces
5. Generate a simple estimate
6. Detailed discussion of software size
7. Size - Effort Relationship
8. Effective Size
9. Source Lines & Function Points
10. Sizing Proxies
11. COTS Sizing
12. Other Sizing Parameters
13. Rework Components
14. Size by Comparison

Day Two

1. WBS creation guidelines
2. Knowledge Base details
3. Learn how to gather & load critical model input data
4. Understand technology & environment input parameter:
 - Definitions
 - Sensitivities
 - Interrelationships
5. Software development phases:
 - Requirements
 - System Integration & Test
 - Maintenance
6. Output charts & reports
7. Exporting & copying data to other applications
8. Risk analysis & Goals

Day Three

1. Best practices & parting advice
2. Course evaluations
3. Capstone case study

See how past attendees have benefited from our SEER for Software Workshop:

- "Instructor was very good and enthusiasm was very high....overall a very enjoyable experience and learned alot"
- "Good introduction to SEER. Well presented."
- "Excellent course - content and presentation and structure. Varying levels of experience and background (Finance or IT) get value. Good for getting started using the tool. Good balance presented between Estimating Methodology, software lifecycle, and software relationships"
- "It was well planned and executed. Good flexibility in rearranging course material."
- "I liked the instructors ability to use his experience over the years to help explain the material. I liked having the courses customized for our area."
- "Discussion of real-life questions about how to model specific situations."
- "Going through the exercises after the material was presented. The instructor taking the time to address individual comments/needs as a consultant."
- "Instructor presented the course data so that it was easily understood. The course moved quickly and kept my interest throughout. Instructor was able to answer all questions with clarity and without hesitation."
- "Hands on experience."
- "Being able to finally understand what the SEER SEM model is all about. I look forward to being able to use the model and in turn challenge the output of the model with my engineering friends here at Lockheed Martin."
- "Instructor was very clear in explaining concepts and demonstrating the tool usage. I liked how he switched between the tool and the course materials. I liked the way the exercises and lectures were interleaved. Having one computer for each pair of students worked well, encouraging hands on usage and discussion with partner."

Earn Project Management Institute PDU credits for attending Workshops:

- Attend Core Workshops and earn 21 PDUs.
- Attend Advanced Workshops and earn 14 PDUs.

ADVANCED WORKSHOP

Advanced workshops are intended for those who have used SEER for Software to develop and evaluate estimates, and are ready to move to the next level in using SEER tools to support their projects. These workshops cover specific topics, including:

- Power-user functions for the SEER expert
- Calibration, customization and integration features
- Project Management
- Project monitoring and control

Pre-requisite: SEER for Software Core. While you may take the Core and Advanced classes back-to-back, we recommend you allow some time in between these two courses to practice the fundamentals.

SEER for Software Advanced Workshop Course Outline:

Day One

1. Core concepts review
2. Calibration
3. Custom Knowledge Bases
4. Scenarios
5. Server Mode

Day Two

1. Repository Administration & Database Features
2. Metrics Analysis & Trend lines
3. Incremental Builds
4. Microsoft Project Integration
5. Parametric Project Monitoring & Control
6. Course evaluations