



Software Architecture: Principles and Practices



Course Description

This two-day course emphasizes the importance of the business (or mission) context in which systems are designed and introduces participants to software architectures in a real-world setting. Case studies illuminate the key technical and organizational issues regarding software architectures. This course is based on the book *Software Architecture in Practice, 2nd Edition*.

Who should attend?

This course is for those professionals who design, develop, or manage the construction of software-reliant systems.

What will you learn?

Attendees gain a thorough overview of software architectures. After completing this course in entirety, learners will have a better understanding of

- the relationships between system qualities and software architectures
- software architectural patterns and their relationship to system qualities
- software architecture evaluation
- attribute-driven design
- software architecture documentation
- architectural reuse

This course is the most fundamental of the six courses in the SEI Software Architecture Curriculum. At the conclusion of the course, you are awarded a certificate of course completion and 1.5 continuing education units (CEUs). Also, you will be eligible to take the SEI's Software Architecture Design and Analysis and Architecture Tradeoff Analysis Method (ATAM) Evaluator Training courses. You will also be better prepared for the SEI's Documenting Software Architectures and Software Product Lines courses. This course is also the first one required in the SEI's Software Architecture Professional and ATAM Evaluator certificate programs.

Course Fees [USD]

U.S. Industry: \$1500
 U.S. Government/Academic: \$1200
 International: \$2250

This course may be offered by special arrangement at customer sites.

Schedule

This 2-day course meets at the following times:
 Days 1-2, 8:30 a.m. - 5:00 p.m. (U.S. locations)
 Days 1-2, 9:00 a.m. - 5:30 p.m. (non-U.S. locations)

Topics

- definition and overview of software architecture
- the architecture business cycle: what influences software architects and software architecture
- understanding and achieving quality attributes
- attribute-driven design
- documenting software architecture
- evaluating software architecture
- architecture reuse

Prerequisites

Before registering for this course, participants should have

- experience in the development of software-reliant systems
- some familiarity with modern software engineering concepts

Materials

Participants receive a copy of the lecture slides and the book *Software Architecture in Practice, 2nd Edition*

The Best Training for Today's Challenges

The SEI is an international leader in software engineering processes and practices and information security. Since 1984, the SEI has been defining and advocating methods for developing high-quality software and protecting networked systems.

- Train in the latest techniques
- Improve your organizations capabilities
- Analyze long-term system-evolution needs
- Learn from instructors with field experience

For More Information

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