

SAFe® Agile Software Engineering



Summary

The discipline of software engineering has evolved over the past decades with the introduction of Lean-Agile and DevOps principles and practices. New skills and approaches help organizations deliver software-centric solutions faster, more predictably, and with higher quality. During this three-day, workshop-oriented course, attendees learn the foundational principles and practices that make up the Agile Software Engineering discipline.

Attendees will learn how continuous flow of value delivery and building quality in are enabled by modern practices including XP technical practices, Behavioral-Driven Development (BDD), and Test-Driven Development (TDD). Attendees will learn proven practices to detail, model, design, implement, verify, and validate stories in a SAFe Continuous Delivery Pipeline. They will know the practices that build quality into code (abstraction, encapsulation, intentional programming) and designs (SOLID, Design patterns). Attendees will also understand how Software Engineering fits into the larger solution context and their role in collaborating on intentional architecture and DevOps.

Learning Goals

To perform the role of a SAFe® 4 Agile Software Engineer attendees should be able to:

- Define Agile Software Engineering and the underlying values, principles, and practices
- Apply the Test-First principle to create alignment between tests and requirements
- Create shared understanding with Behavior-Driven Development (BDD)
- Communicate with Agile modeling
- Design from context for testability
- Build applications with code and design quality
- Utilize the test infrastructure for automated testing
- Collaborate on intentional architecture and emergent design
- Apply Lean-Agile Principles to optimize the flow of value
- Create an Agile Software Engineering plan

Topics Covered

- Introduction to Agile Software Engineering
- Connecting Principles, and Practices to Built-In Quality
- Accelerating Flow
- Applying Intentional Architecture
- Thinking Test-First
- Discovering Story Details
- Creating a Shared Understanding with Behavior-Driven Development (BDD)
- Communicating with Models
- Building Systems with Code Quality and Design Quality
- Implementing with Quality

What Attendees Get

The class registration includes:

- Student Workbook
- Preparation and eligibility to take the exam
- One-year membership to the SAFe Community Platform
- Certification of completion
- Certified SAFe® 4 Agile Software Engineer certification upon passing of exam
- One Certification exam attempt (re-takes at an additional fee)