SAFe® Agile Software Engineering

Agile Software Engineering practices for the Lean-Agile
Based on version 4.6 of SAFe

The discipline of software engineering has evolved over the past decade with the introduction of Lean-Agile and DevOps principles and practices. New skills and approaches to software engineering 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 Lean-Agile principles are driving these changes including continuous flow of value delivery, fast feedback on decisions, and building quality in. They will connect these principles to modern developing practices including XP technical practices, Behavioral-Driven Development (BDD), Test-Driven Development (TDD), and applying the Agile Testing Quadrant. Attendees will learn the best practices to model, design, implement, verify, validate, deploy, and release stories in a SAFe Continuous Delivery Pipeline. Attendees will also understand how Software Engineering fits into the larger solution context and their role in collaborating on emergent architecture and intention design.

Who Will Benefit?

The following will benefit from this course:

- Development Managers, Engineering Managers
- Development Leads, Developers, UI/UX Developers
- Infrastructure Architects, System Architects
- Product Managers, Product Owners
- QA Managers, Testers

Learning Goals

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

Goal 1: Define Agile Software Engineering and the underlying values, principles, and practices

Goal 2: Apply the Test First practice to create alignment between tests and requirements

Goal 3: Utilize the test infrastructure

Goal 4: Create tests with Behavior-Driven Development (BDD)

Goal 5: Outline models for communication and representation

Goal 6: Design from context

Goal 7: Build applications with code and design quality

Goal 8: Collaborate on intentional architecture and emergent design

Goal 9: Create an Agile software engineering plan

Goal 10: Create Minimum Marketable Feature (MMF)

Topics Covered

- Introduction to Agile Software Engineering
- Values, principles, and practices
- Applying intentional architecture
- Thinking Test First
- Creating a Minimum Marketable Feature (MMF)
- Creating tests with Behavior-Driven Development (BDD)
- Modeling stories
- Building systems with code quality
- Building systems with design quality
- Lower level testing with Test-Driven Development (TDD)

Recommended Prerequisites

All are welcome to attend the course, regardless of experience. However, meeting the following prerequisites will make the training more productive.

- Understanding of SAFe for Teams
- Background in engineering, development, managing development, or quality assurance

What Attendees Get

The class registration includes:

- Student Workbook
- Preparation and eligibility to take the exam (for Beta attendees)
- One-year membership to the SAFe Community Platform (for Beta attendees)
- Certification of completion (for Beta attendees)
- SAFe Agile Software Engineering Practitioner certification upon passing of exam (for Beta attendees)
- One Certification exam attempt upon General Availability (GA) of the course (re-takes at an additional fee)

Annual Renewal

Membership renewals are one year from the date certification is earned

- Renewal fee: $195