

This two day, instructor led course prepares students to apply Agile software development practices with Scrum to real projects. The course focuses on team practices and the ability to begin using Scrum effectively upon course completion.



#### AT COURSE COMPLETION

Upon course completion students have the tools to effectively implement Scrum within their team. In addition to learning the basic Scrum framework techniques for ensuring successful teams, students will plan their own Agile and Scrum adoption while in the class.

#### PLANNING

- Use effective product backlog management techniques
- Estimate work using relative estimation techniques
- Plan and execute a product release
- Describe an effective process framework for an Agile team
- Identify key factors in the success of an Agile adoption

#### EXECUTING

- Learn the Scrum framework
- Identify artifacts, ceremonies, and processes of Scrum
- Understand and perform roles within a Scrum team

#### IMPROVING

- Lead and participate in meaningful retrospectives
- Apply Lean principles to improve existing process
- Make deliberate positive changes for the team

#### IMPLEMENTING

- Discuss specific Agile implementation challenges
- Identify opportunities for using Agile practices
- Develop a high level plan for implementing Scrum

#### AUDIENCE

This class is suitable for anyone working with a product development team, regardless of the student's role.

Typical students include:

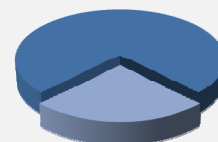
- Software Developers and Testers
- Product Managers
- Organizational Leaders
- Team Managers
- Project Managers
- Software Architects

#### PREREQUISITES

Before attending this course, students should have experience in the following:

- Work product or software development team
- Vocabulary to describe a basic software system

#### LECTURE / HANDS-ON LAB BALANCE



- Discussion
- Workshop

## MODULE 1: AGILE AND LEAN AND WHY THEY WORK

This module provides a solid foundation for understanding and evaluating Agile software development. Agile is distinguished as a set of core values distinct from Agile practices covered later in the course. Practice in Lean Manufacturing and Lean Software Development are discussed, focusing on student's abilities to apply Lean thinking to problem solving and improving existing processes.

- Understand how to apply Agile and Lean practices effectively
- Articulate Agile values and the principles supporting the Agile Manifesto
- Apply the seven principles of Lean Software Development
- Value Stream Analysis as a tool for improvement
- How Lean is practiced in software development

## MODULE 2: SCRUM FUNDAMENTALS

This module provides the foundations of Scrum, to be built on in future modules. Students gain a working vocabulary and common understanding of processes. Specific uses of Scrum and techniques for effective teams are discussed in depth.

- Understand Scrum's origins
- Examine Scrum's role in Agile
- Articulate the primary Scrum model
- The value proposition of Scrum
- Build a common vocabulary
- Review several implementation case studies

## MODULE 3: ESTIMATING AND PLANNING

This module introduces effective planning techniques for Scrum environments. Students learn to apply Agile planning techniques in Scrum teams and throughout the product delivery process. Specific attention is paid to relative estimation techniques, effective backlog management, creating effective requirements, and planning multiple Sprints. Students learn to estimate and plan software features.

- Constructing and managing an effective backlog
- Relative estimation techniques
- Planning for a product release
- Planning multiple iterations of work
- Creating and managing useful backlog items

### Planning Poker Workshop

This facilitated workshop demonstrates the effectiveness and ease of applying relative estimation techniques. Students practice [Planning Poker](#) and study patterns of using the technique.

## MODULE 4: THE AGILE ENTERPRISE

This module focuses on issues related to scaling Scrum and Agile throughout an organization and includes topics on managing multiple or distributed teams. Techniques for successfully implementing Scrum are introduced as well as using Scrum to enable an Agile organization at the executive level.

- The Scrum Driven Enterprise
- Top Down and Bottom Up Implementations
- Enterprise Planning Techniques
- Structuring operations to support constant flow of value
- Strategies for managing large teams

## MODULE 5: AGILE PATTERNS AND ANTI-PATTERNS

This session provides an opportunity to learn from the implementations of other organizations and is presented as a rich collection of Patterns and Anti-Patterns of Agile and Scrum. Discussion focuses on specific practices that have been effective or ineffective for other teams.

## MODULE 6: PLAN YOUR IMPLEMENTATION (WORKSHOP)

This interactive discussion is facilitated by your instructor to help plan your first iteration of work using Agile and Scrum. This session focuses on finding genuine challenges and opportunities in your organization and identifying the most effective combination of techniques for your teams.

- Create an implementation backlog
- Identify specific roles within your organization
- Find sponsorship for your Agile adoption
- Make a case for Agility in your organization
- Commit to specific actions for adopting Lean, Agile, and Scrum practices

## COURSE DESIGNER

This course was designed by David Starr of Accentient, Inc. David is a Certified Scrum Master with over 11 years experience managing software development teams and over 6 years experience leading Agile development practices. He is an experienced developer and trainer.

For more information, visit [www.accentient.com](http://www.accentient.com).