

Course Outline

Agile Boot Camp: ICP Fundamentals Certification

Course AGILEBC2DAY: 3 days Instructor Led

About this course

There is more to Agile than simply a different style of programming. That's often the easy part. Agile methods change your approach for requirements gathering, estimation, planning, team development, stakeholder interactions, and more. In this class, you will explore the leading Agile methods. Whether you develop software or are responsible for other kinds of work, you'll learn the basic premises and techniques behind Agility — so that you can apply them to your work.

After using role-plays to experience the basics of agility, the class will be broken into Agile teams and your expert instructor will drive each team through the Agile process from planning through execution. We will use a Case Study project that is not specific to software development (making it easy for technical- and business people alike to follow and understand). Then you will choose a project from your own domain to try out these techniques on. Your instructor will answer questions with real-world experience, and you will leave the class with practical knowledge and a clear roadmap for your team's success.

Attendees who successfully complete this course will receive the [ICAgile Certified Professional Certification \(ICP\)](#) after course completion.

Audience profile

Because this is an immersion course and the intent is to engage in the practices every Agile team will employ, this course is recommended for all team members responsible for delivering outstanding results, whether they are developing software, doing other Information Technology projects, or working in other Non-IT parts of the business. That includes, but is not limited to, the following roles:

- Business Analyst
- Technical Analyst
- Project Manager
- Software Engineer/Programmer
- Development Manager
- Product Manager
- Product Analyst
- Tester
- QA Engineer
- Documentation Specialist
- Or any business professional

The Agile Boot Camp is a perfect place for cross-functional teams to familiarize themselves with Agile concepts and methodologies and learn the basics of how to function as an Agile team. It's also a wonderful springboard for team building & learning. We invite you to bring your team and a team project to work on in class.

Course Outline

At course completion

After completing this course, students will be able to:

- Structure a team with generalizing specialists so the team can develop excellent results incrementally
- Practice and maintain a regular cadence when delivering customer value in each iteration
- Follow the team approach; start as a team, finish as a team — and focus on delivering value to the organization
- Learn the different approach to Agile architecture and design that supports a more incremental and emergent project
- Gain knowledge and understanding of Agile principles and why they are so important for each team
- Embrace the five levels of planning and recognize the value of continuous planning
- Build a backlog of prioritized and estimated user stories that provides emergent requirements for analysis and foster customer engagement and understanding
- Engage in more effective estimating (story points) and become more accurate by being less precise
- Create accurate Agile release plans that connect you back to business expectations – including hard date

Course Outline

Kick-off Brainstorm: Why be Agile?

We introduce the boot camp by discussing the class members' shared experience with prediction. Why is it so hard to do, and what impact does that have on our ability to plan projects?

Module 1: Run a Sprint, Release a Product increment

We begin by experiencing day-to-day work on an Agile project

1. *Role-Play: Sprinting and Daily Scrum - After brief instruction about key concepts, you will participate or watch as an Agile team holds a Sprint's-worth of Daily Scrums, then engage in a class-wide discussion of these topics:*
 1. Agile Team Dynamics
 1. Iterative work
 2. Daily Status, plan & corrective actions
 1. Using a Task Board & Buren Down Chart to understand progress
 3. Team sharing work with each other
 4. Scrum Master:
 1. Facilitating interaction
 2. Removing impediments
 5. Product Owner:
 1. Real-time validation & feedback
 2. Adapting to change
 1. ... when un-planned-for tasks are discovered
 2. ... when tasks take more or less time than expected
 3. Agile quality management
 1. Using automated testing to get immediate feedback
 2. Using Continuous Integration to catch and correct inconsistencies right away
 3. Using Test-Driven Development to ensure the goodness of what you build

Course Outline

2. *Role-Play: End of Sprint Ceremonies - After brief instruction about key concepts, you will participate or watch as an Agile team holds the end-of-Sprint ceremonies, then engage in a class-wide discussion of these topics:*
 1. Holding a Sprint Review
 1. Effectively a Milestone-Review at the end of each Sprint
 2. Making release decisions
 3. Using a Release Burn-Down chart to visualize project progress
 4. Dealing with project issues
 5. Obtaining stakeholder concurrence on project progress
 2. Demonstrating what was built in the Sprint
 1. Getting feedback from stakeholders
 2. Identifying new User Stories
 3. Holding a team retrospective
 1. Agreeing what is working well, not working well, and possible improvements
 2. Deciding to make improvements to the team's practices, rules & norms
 4. Releasing a Product Increment
 1. Minimum Viable Product (MVP)
 2. Early Acceptance Testing
 5. Quality Management – Integrating work with other teams' work

Module 2: Plan a Sprint

We look at how a Sprint Backlog is built

1. *Role-Play: Story Refinement - After brief instruction about key concepts, you will participate or watch as an Agile team refines their understanding of the User Stories for the up-coming Sprint, then engage in a class-wide discussion of these topics:*
 1. Collaborating to define requirements details
 2. Capturing Product Owner guidance
 3. Asking clarifying questions of the Product Owner
2. *Role-Play: Sprint Planning - After brief instruction about key concepts, you will participate or watch as an Agile team plans a Sprint, producing a Sprint Backlog, then engage in a class-wide discussion of these topics:*
 1. Identifying the tasks required to complete each User Story
 1. Using the team's Definition of Done as a guide
 2. Team members signing up for tasks
 1. Estimating task effort
 3. Ensuring the Sprint Plan is realistic
 4. Committing to the Sprint Plan

Module 3: Adapt to Change

Next, we see how changes to the Product Backlog are handled

1. *Role-Play: Changes to the Product Backlog - After brief instruction about key concepts, you will participate or watch as an Agile team incorporates new User Stories into their Product Backlog, then engage in a class-wide discussion of these topics:*
 1. Product Backlog changes come from many sources
 2. Product Owner acting as gatekeeper to the Product Backlog
 1. Deciding what's in or out

Course Outline

2. Prioritizing against existing User Stories
3. Estimating new User Stories in Story Points
2. *Role-Play: Changes to the Release Plan - After brief instruction about key concepts, you will participate or watch as an Agile team updates their Release Plan to accommodate additions to the Product Backlog, then engage in a class-wide discussion of these topics:*
 1. Determining if changes impact Release Dates
 1. Using the Team Velocity and Story Point estimates
 2. Product Owner deciding if the Release Plan change is OK
 1. Based on knowledge of project constraints
 2. Communicating the change to project stakeholders
3. *Role-Play: Product Discovery - After brief instruction about key concepts, you will participate or watch as an Agile team updates their product concept and Product Backlog as a result of feedback from users, then engage in a class-wide discussion of these topics:*
 1. The value of an early first release to get early feedback from users
 2. Evolving the product concept in response to user feedback
 3. Using experimentation to validate understanding of users' needs & preferences

Module 4: Elaborate Stories and Plan a Release

Now we extend the Release Plan further into the future

1. *Role-Play: Elaborate Stories in the Product Backlog - After brief instruction about key concepts, you will participate or watch as an Agile team adds key information to the User Stories in their Product Backlog, then engage in a class-wide discussion of these topics:*
 1. Product Owner adjusting prioritization of the Product Backlog
 2. Product Owner articulating Acceptance Criteria for User Stories
 1. Team asking clarifying questions about Acceptance Criteria
2. *Role-Play: Story Point Estimation - After brief instruction about key concepts, you will participate or watch as an Agile team uses Planning Poker to estimate User Stories in Story Points, then engage in a class-wide discussion of these topics:*
 1. Estimating in Story Points
 1. What Story Points mean and don't mean
 2. The product Owner's role in clarifying User Stories during estimation
 3. How to play Planning Poker
 4. Resolving differences in estimates
 5. The role of discussion in coming to consensus on estimates
3. *Role-Play: Release Planning - After brief instruction about key concepts, you will participate or watch as an Agile team plans a release, then engage in a class-wide discussion of these topics:*
 1. Using Team Velocity
 1. What is Velocity
 2. When does a team's Velocity change?
4. Mapping User Stories into Sprints
 1. Using Priorities to guide order
 2. Determining release date using number of Sprints and Sprint length
 3. Using Story Point estimates and team Velocity to limit capacity

Course Outline

Module 5: Begin an Agile Project

Having role-played all of the key Agile activities, we will now turn to our own projects and see how it all applies to our work. Your breakout team will begin by choosing a project from your own domain that will be used for the remaining exercises in the Boot Camp.

1. *Exercise: Product Vision - After brief instruction about key concepts, you will create a Product Vision for your chosen project, then engage in a class-wide discussion of these topics:*
 1. Collaborating with the Product Owner on a Product Vision
 2. Using the Collaborative Framing technique to capture your Product Vision
2. *Exercise: Users & Persona - After brief instruction about key concepts, you will identify all of the Users for your chosen project and write a Person for one of them, then engage in a class-wide discussion of these topics:*
 1. Identifying all user roles
 2. Writing a Persona
 1. Choosing user roles that need a Persona
3. *Exercise: Customer Journey - After brief instruction about key concepts, you will capture the Customer Journey for one of the user roles in your project, then engage in a class-wide discussion of these topics:*
 1. Visualizing the Customer Journey
 1. Normal journey for a user
 2. Breaking large customer activities into smaller steps
 3. Alternative journeys
4. *Exercise: Epics & User Stories - After brief instruction about key concepts, you will translate your Customer Journey into Epics and User Stories, then engage in a class-wide discussion of these topics:*
 1. Translating Journey Steps into Epics
 1. Using the format: "As a {} I need {} so that {}"
 2. Breaking Epics down into User Stories
 1. Using the format: "As a {} I need {} so that {}"
5. *Exercise: Minimum Viable Product and Other Releases - After brief instruction about key concepts, you will determine what releases are appropriate for your chosen project, then engage in a class-wide discussion of these topics:*
 1. Prioritizing releasing early and often
 1. Value delivered to Customer
 2. Feedback from users
6. Defining Minimum Viable Product (MVP) – First Release
 1. Minimum time and effort for maximum value
7. Defining other releases
 1. Deliver in Priority Order

Module 6: Agile Team & Mindset

Now that we have experienced all of the Agile practices, we will turn our attention to the team that makes it all happen.

1. *Exercise: Team Roles - After brief instruction about the team roles, you will determine who should play which roles on the Agile team for your chosen project, then engage in a class-wide discussion of these topics:*
 1. Scrum Master
 2. Product Owner
 3. Small, cross-functional team

Course Outline

2. *Discussion: Self-Organizing Team Dynamics - After brief instruction and a video about key concepts, you will engage in a class-wide discussion of these topics:*
 1. What it means to be a Self-Organizing team
 1. Collaborating to establish team rules and norms
 2. Collaborating to plan and manage the project
 2. Interpersonal dynamics on a high-performance team

Module 7: Core Agile Concepts

We end the Boot Camp by pulling together all of the ideas we have experienced and drawing the big picture Agile concepts.

1. *Discussion: Agile Manifesto - You will engage in a class-wide discussion of these topics:*
 1. The 4 Agile Values
 2. The 12 Agile Principles
2. *Discussion: Variety of Agile Methods - After brief instruction about them, you will engage in a class-wide discussion of these topics:*
 1. Agile is not a single method
 1. All Agile methods are Lean
 2. Why you would choose Scrum vs. Kanban
 3. How Scrum differs from Kanban
 2. Scaling Agile to large projects and bigger contexts
 1. Scrum of Scrums
 2. DevOps
 3. SAFe®
3. *Discussion: The Agile Mindset - After brief instruction about them, you will engage in a class-wide discussion of these topics:*
 1. Agile mindset enables Agile methods & practices
 2. Key elements to Agile success
 1. And the impact on Agility if any is missing
4. *Final Exercise: Your Agile Journey - After brief instruction about the Agile Journey, you will plan the next steps in your Agile Journey (yourself, your team, your organization), then share your plan with the class.*