

Certified Scrum Developer (CSD)

Course Description

The Certified Scrum Developer workshop is an intensive five-day session that teaches programmers and quality assurance professionals to work in self-organizing, cross-functional Scrum teams to build an increment of completely done functionality using modern engineering practices on the Microsoft .NET platform using Visual Studio Team System (VSTS). The teams are taught how to do so within one iteration, or Sprint, using the Scrum Agile process.

The course covers:

- What is the Scrum framework, rules, timeboxes and artifacts, and what is your role as a developer on a Scrum team.
- How to define what work is involved in turning a Product Backlog Item (PBI) into something that is potentially shippable by the end of a Sprint, how to turn a day in a Sprint's work into something that can be inspected and adapted to, and what is the process for turning a PBI item into something "done," including standards, guidelines, and templates.
- How to establish a set of work on the *Scrum for Team System* process template.
- How to establish a development environment on VSTS for a team in which continuous integration, test driven development, changes, and automated testing can occur.
- How to decompose a PBI so during the Sprint Planning meeting so the team can start working on it. This includes understanding the PBI by defining how you will test it for completion (acceptance test driven development), designing the part of the architecture within which the PBI will be instantiated, how emergent architecture and design work and what is required to do them (clean code and design, and augmented test cases).
- How to manage technical debt.
- How to select who will do what to cause the PBI to be "done" by the end of the Sprint.
- How to monitor progress in working on the PBI to optimize the likelihood of it being done by the end of the Sprint.
- How to understand existing code assets and architectures.
- How to work with multi-tier .NET applications than include both web and database components.
- How to figure out what refactoring has to be done if the functionality is being build into existing code.
- How to figure out what tests are needed to ensure the new and existing functionality works and all non-functional performance requirements are met ... in the single and the aggregate ... through automated testing facilities.
- How to develop code using Test Driven Development (TDD) while partnering with another engineer or a QA person.
- How to test that functionality is "done" and that the existing product works at least as well as before.

- How to identify, track, and resolve bugs and impediments.
- How to establish a velocity and velocity range across time.

The course will be conducted by Certified Scrum Trainers/Developer, working for qualified Scrum Training Organizations (STO's). These STO's are either Microsoft Inner Circle Partners or MVP's.

The CSD course will be generally available beginning March, 2010, in conjunction with the release of VSTS 2010. If you wish to attend a CSD course prior to this time, there are a few openings. You may request to attend these early course by [send an email to the Scrum Alliance](#).

Public FAQs

General

What's the purpose of the course?

The purpose of the Certified Scrum Developer (CSD) course is to give people, working on a Scrum team, hands-on experience delivering potentially shippable software by using powerful engineering tools and practices. The course provides first-hand exposure to the benefits of Scrum as a framework, warning signs of team or engineering dysfunction, and practices to address the challenges faced in many software development teams.

How is it different from existing courses?

The focus of the Certified Scrum Developer (CSD) course is on the implementation of good engineering practices within the Scrum framework. The CSD course:

- Equally focuses on teamwork as it does on technical practice. Acknowledging that software development in the 21st century relies on people skills as much as it does on tech chops
- Addresses head on the issues that other Scrum courses shy away from
- Simulates a real working environment rather than being “chalk and talk”
- Innovative continual assessment model
- Dynamically adapts to the level of the students
- Is designed for teams rather than individuals

Who should take it?

Developers interested in building their knowledge of Scrum and solid engineering practices.

Teams new to Scrum and Agile who want an accelerated start to working in an Agile way using Scrum

Is it available publicly?

CSD certification classes will be available publicly starting in March 2010.

Is available for on-site delivery?

Yes, starting March, 2010.. Please [email the Scrum Alliance](#) for details.

Can it be customized?

The Scrum Alliance will continuously look to improve its course offerings. However, to ensure consistency and quality across courses, individualized customizations will be kept to a minimum. However, there are two paths for supplementing the course:

If you have feedback about the course, send an [email to the Scrum Alliance](#).

If there are additional materials you would like taught, contact a Scrum Training Organization to discuss additional courses that could be offered.

Why is the Scrum Alliance doing this?

Scrum is a framework for ensuring transparency in the development process. To this end, Scrum does not ensure that teams know how to build quality products. The purpose of the

certification is to expose developers to best practices in the software industry in order to enable them to function more productively on a Scrum team.

How is this different from the existing SA courses?

The Certified Scrum Developer (CSD) course will cover much of the material taught in other SA courses like CSM and CSPO. However, unlike these courses, the CSD course dives directly into development best practices “hands on”. In the CSD course, student teams actually practice developing potentially shippable software in a controlled environment.

Where will the course be available?

This course will be offered at multiple locations worldwide throughout the year. For the list of most recent classes visit <http://www.scrumalliance.org/csd>

When will it be available?

An alpha session will be available September 28, 2009. There will be limited availability beta sessions of the course November 2009-February 2010. General availability begins March 2010.

Why do we need a certification?

Scrum encourages, and almost dictates, the use of sound engineering practices to achieve iterative incremental development cycles. Through the certification, development managers can know that a developer has been exposed to, and demonstrated a base-level of knowledge retention in, good engineering practices.

How will SA ensure the quality of the course delivery?

Only licensed Scrum Training Organizations (STOs) may offer the course. Such organizations are vetted for their ability to be able to deliver a quality course experiences – technically, logistically and ethically.

The Course content is licensed and maintained centrally ensuring quality, consistency and timeliness.

Only licensed Certified Scrum Trainers/Development (CST/D) may deliver the course. These instructors have to pass a rigorous 5-step qualification and recertify annually based on their performance.

Scrum isn't about development; it's about running a project. Why are you offering a Certified Scrum Developer?

To make our customers more successful. Scrum exposes problems in the development process through transparency and an iterative incremental development process. The Certified Scrum Developer (CSD) program is intended to teach industry best practices and tools that development teams can use to address the problems that are exposed.

It sounds like this is only about Microsoft technology. What if we do Java or PHP?

The CSD program is about using Scrum and enhancing quality with engineering best practices. Accordingly, there are two different courses and qualifications. Microsoft tools are leveraged is one flavor of the class, but there are also courses offered that utilize different tools for the hands-on development in class. Be sure to sign up for the one you want.

Is the course about Scrum, Agile, or both? What if we use other methodologies?

Agile software development is merely a set of methodologies developed in 2001 with the formulation of the Agile manifesto. Scrum is a framework, based on those Agile methodologies, for delivering complex work in an iterative and incremental way.

The Certified Scrum Developer (CSD) class is about developing good software by using the Scrum framework and good engineering practices. There are other worthy methodologies out there, but the CSD course will focus on development with Scrum.

Is the course about tools or practices?

Both. The focus will be on building good engineering practices using Scrum techniques for rapid software development. But, students will also utilize various tools to help implement Scrum practices.

What does this have to do with the current SA certifications?

The CSD certification for Scrum team members (developers) will complement the pre-existing CSM certification available for ScrumMasters.

What do you mean about the course being team based?

At the start of the class, teams of four people are created. If you register with three other people who you would like to team with, that is your team. Otherwise a cross-functional team with all the skills needed to succeed in the course is created by the CST/Ds teaching the course.

CSD for .NET

What's the purpose of the course?

To teach developers how to develop an increment of potentially shippable code within a timebox using C# and Visual Studio Team System (VSTS) 2010.

Why is Microsoft doing this?

The mission of Microsoft Developer Division is *To make every developer successful with Microsoft platforms and tools*. At the same time, Microsoft recognizes that people and process, especially team process, are as important as the technology in determining success. By collaborating with the Scrum Alliance, Microsoft wants to ensure the best course possible to enable that success.

How is this different from the existing MS courses?

The CSD course is a novel format that interleaves:

1. The technical skills required for a individuals working as developers or testers in a Scrum Team, using VSTS 2010 and C#.
2. The teamwork skills required for a individuals working as a developers in a Scrum Team
3. The Agile and Scrum knowledge required for individuals working as a developers in a Scrum Team

What's the syllabus?

For course description and contents, please visit www.scrumalliance.org/CSD.

Why are you using the Scrum for Team System (SfTS) process template? Why Scrum and not MSF?

Team Foundation Server (TFS) lets the team choose the most appropriate process template for the project. Scrum for Team System (SfTS) has won broad acclaim among TFS users and most fully implements the Scrum and Agile engineering practices that are covered in the course. If you are using one of the MSF process templates, then all of the practices will still apply, but there will be small differences in implementation to which you'll need to adjust.

What if I don't use VSTS?

All of the practices covered in the course will still apply, but you will need to assemble your own set of tools to implement them.

What if I use VSTS 2008 or 2005?

The class will use VSTS 2010. It is a major advance over 2008, especially in Test, Architecture and Team Foundation Server. If you are unable to upgrade to VSTS 2010 for some reason, you will need to complement your existing version with additional tools.

What's Scrum?

A process for complex product management that uses the Agile principles of 'inspect and adapt' to develop increments of potentially shippable code through rapid iterations.

What's the SA?

The ScrumAlliance, a non-profit organization, hosts Scrum. The ScrumAlliance's mission is to "transform the world of work." To this end, it promotes community, funds research, and offers programs - including the certification program - to promulgate knowledge of what Scrum is and how to use it.

I'm a Microsoft Certified Solution Developer, do I have to do this too?

No, but if you would like to become a Certified Scrum Developer, you must take the CSD course and exam.

For Participants

What does it cost to take the course and certification?

The course fee will vary, but the suggested retail price is \$4,000 per student in the United States.

I want to take the course. What do I do?

Go to <http://www.scrumalliance.org/> to find a class.

Do I have to take the full five days?

Yes.

Do we have to come as a ready-made team, or can we sign up as individuals?

Yes to both. It is possible to sign up as a ready-made team. However, whether you stay as a team will be up to the specific course trainer. To answer this question, please contact the trainer for your course.

If I attend the class, am I guaranteed to become a Certified Scrum Developer (CSD)?

No. In addition to successful completion of the five days of the course, each participant must complete a certification exam within 30 days of finishing the class. There will be a minimum acceptable score for exam. In other words, it is possible that not every attendee will pass the course and become certified.

Do I need to know how to write code to take this class?

Not necessarily. A large component of this course does involve developing increments of code on a particular platform, but coding is not the only thing required to create a “done” increment. Designing, testing, documenting, refactoring, and implementing also need to be done. We do hope that every attendee will feel compelled to do some coding, even if it isn’t their core competency.

For existing SA Members

I’m a CSM, do I have to do this too?

This training program is for people that want to become Certified Scrum Developers. While the information and training may be incredibly useful for developing the toolkit of a CSM, there is no requirement.