

## Certified Scrum Developer Agile Engineering (CSD-AE)

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### Course Summary

#### Description

Led by our expert Agile trainers, this virtual, online leadership experience delivers the quality you've come to expect from the convenience of your desktop or laptop. This live, online class is designed to help software development professionals and teams be more effective when implementing Scrum and other Agile software development methodologies. It is intended for professional software developers who are on a Scrum team and want to understand how Scrum and Agile engineering practices are applied and how they affect their role in the team. You will learn how to create and maintain high-quality systems through industry standard practices such as Test-Driven Development, Continuous Integration and common software design patterns. Learning Objectives of the Agile Engineering class also fulfill the 3-day Technical Class requirements for the Scrum Alliance Certified Scrum Developer(CSD) credential. Combined with attendance to a Certified ScrumMaster (CSM) class and passing the CSM test those completing the Agile Engineering class qualify for the CSD credential.

#### Objectives

At the end of this course, students will learn:

- Their role on a Scrum team.
- To clearly understand User Stories.
- To write effective unit tests.
- To quickly and accurately break down work requirements.
- To write high quality code and be able to evaluate code quality.
- To work collaboratively and efficiently with the other members of my Scrum team.
- To write small tests then write the code to pass the tests and clean up the code.
- To create software components that are maintainable and efficient.
- common language to use when discussing application design with other developers.
- To clean up my new code safely.
- To use automatic tools to refactor.
- To verify that my code works in the system and does not break the system as often as possible.
- To use a build system that automatically builds the system and runs all automated tests so that integrating often is as easy as possible.

#### Topics

- Develop the correct technique for continuously integrating your newly developed code into your existing code base
- Apply Agile and Scrum principles and best practices to form the best mix for your team's success
- Learn the different approach to Agile architecture and design that supports a more incremental and emergent project
- Transform your development processes to reflect the most efficient approach given your organization's constraints
- Learn how to adopt Agile practices effectively within the context of your existing software development framework
- Utilize refactoring to ensure a longer lifespan of your software
- Discover how continuous, incremental improvement will allow your team to continue growing long after the conclusion of the class

#### Audience

This course is designed for Software Developers/Architects and Software Development Managers.

#### Prerequisites

Before taking this course, students should have experience in any modern programming language (i.e. C#, Java, JavaScript), a laptop with a working development environment, and internet access.

#### Duration

Three days