

# € TRAINING

Certified Scrum Developer CSD

A group of four smiling professionals (two men and two women) in a meeting setting, wearing white shirts. The image is partially obscured by a blue curved graphic element.

4 - 8 November 2024  
Barcelona (Spain)



# Certified Scrum Developer CSD

REF: B2216 DATE: 4 - 8 November 2024 Venue: Barcelona (Spain) - Fee: 6145 Euro

## Introduction:

This training program provides participants with essential knowledge and skills to become a Certified Scrum Developer CSD. It empowers them to understand Agile principles, Scrum framework, and practices essential for effective software development within Scrum teams.

## Program Objectives:

At the end of this program, participants will be able to:

- Understand Agile values and principles.
- Apply Scrum practices and ceremonies in software development.
- Collaborate effectively within Scrum teams.
- Develop high-quality software using Agile engineering practices.

## Targeted Audience:

- Software Developers.
- QA Engineers.
- Technical Leads.
- Personnel involved in Agile software development processes.

## Program Outline:

### Unit 1:

#### Agile and Scrum Fundamentals:

- Introduction to Agile methodologies.
- Agile Manifesto and principles.
- Scrum framework overview: roles, events, and artifacts.
- Scrum values and their importance in team dynamics.
- Comparing Scrum with other Agile frameworks Kanban, XP.

## Unit 2:

### Agile Software Development Practices:

- User Stories: writing, estimating, and refining.
- Sprint Planning: preparing backlog items for development.
- Daily Stand-ups: conducting effective daily Scrum meetings.
- Sprint Review and Retrospective: evaluating sprint results and continuous improvement.
- Definition of Done DoD and its role in delivering increments.

## Unit 3:

### Test-Driven Development TDD:

- TDD principles and benefits.
- Red-Green-Refactor cycle in TDD.
- Writing unit tests using testing frameworks JUnit, NUnit.
- Integration of TDD with Scrum development process.
- Continuous integration and automated testing practices.

## Unit 4:

### Pair Programming and Code Reviews:

- Pair Programming: benefits and techniques.
- Conducting effective pair programming sessions.
- Code Reviews: principles and best practices.
- Peer feedback and collaborative code improvement.
- Tools and techniques for code collaboration GitHub, Bitbucket.

## Unit 5:

### Agile Software Design and Refactoring:

- Principles of Agile software design.



- Refactoring techniques and patterns SOLID principles.
- Implementing design patterns in Agile projects.
- Emergent design and evolutionary architecture.
- Balancing flexibility and maintainability in Agile development.