

Agile & Automotive SPICE®:

A Lean approach to Automotive SPICE®-compliant development

Most of automotive software concerns life-critical systems. No wonder therefore that such emphasis is being placed on ensuring the highest quality of the products delivered. One of the most recognized solutions in this context is the implementation of Automotive SPICE® and Functional Safety (ISO 26262). Unfortunately, this shows too often that - while assuring the highest quality and functional safety – the implemented processes tend to slow the whole development down.

At the same time, Lean practices are gaining more and more interest in software development. One elementary Lean component is Kanban, a visual management tool used for enabling “pull” flow and just-in-time (JIT) development. Lean is a methodology which groups several adaptive approaches to allow for a better reaction to changing environments and a clearer focus on the customer. Our two-day “S-Kanban” course will provide participants with the knowledge and skills necessary for utilizing Kanban in Automotive SPICE®-based software development projects. Examples, exercises and case studies will help to illustrate how Lean and Agile practices can support an effective Automotive SPICE® implementation.

Course Contents

- Making software development lean and agile
 - The Agile Manifesto
 - Pull versus push
 - One piece flow versus large batch production
- Kanban – a simple idea and a revolutionary change
- Designing a S-Kanban board
- Project planning in S-Kanban – prioritizing and estimating work
- Project execution – meetings in S-Kanban (daily stand-up, product reviews)
- Project tracking – Lean metrics (work in progress, lead time), cumulative flow diagrams
- The value stream mapping technique
- The relationship between lean practices and Automotive SPICE® processes
- Automotive SPICE® assessments in practice; collecting evidences in a lean environment
- From Money to Cash; implementing Kanban for complete product development system

Course Objectives

The course aims to teach participants how to combine Lean practices with Automotive SPICE®-based software development. After completing the training participants will be able to:

- apply Lean principles in their organizations
- describe the architecture of Automotive SPICE®, i.e. levels, processes, base practices
- gather user requirements in form of user stories; estimate and prioritize work
- visualize and optimize development processes using Value Stream Mapping
- create Kanban boards and set the Kanban limits
- plan and execute projects according to the Kanban methodology

- measure the project status with Kanban metrics
- identify and address bottlenecks in software development processes
- apply Agile and Lean techniques to ensure compliance with Automotive SPICE®

Target Group & Prerequisites

Target Group: Development executives, development managers and line managers; Developers; Quality Engineers; Project managers; Business analysts; Marketing representatives; People involved in gathering, analyzing and defining requirements; People responsible for the definition and improvement of software development processes and all others interested in Automotive SPICE® and Lean practices.

Prerequisites: A basic knowledge of Lean concepts, Automotive SPICE®, project management, and system and software engineering is helpful, but not a must.

Course Details

Duration: 2 days, 9.00 - 17.00 h

Course fee: € 990* per person. We grant a 20% discount from the second participant onward of the same company

The price includes the 2-day training course, materials, Automotive SPICE® pocket guide, lunch & coffee and an attractive evening-event on the first day.

Please find the actual course dates: www.kuglermaag.com/trainings

Contact

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