

## Workshop: Reliability Engineering Basics

**Date:** 2020.00

**Venue:**

The goal of the course is to give the engineers a basic understanding of Reliability engineering techniques and practical tools which are used to support product/ system analysis and design. Through exercises and team work the students will be familiarized with the Reliability terms, methods and concepts. Prior knowledge of the basic statistical methods will be helpful. **Bring a scientific calculator with you.**

Reliability Engineering Basics	
8:00	<i>WELCOME and introduction to course program + coffee</i>
8:15	<b>1. Basic Terms and Concepts</b> - Terms, concepts and parameters - Reliability calculations: Failure rate, MTBF, MTTF, MTTR
10:15	<i>COFFEE break</i>
	<b>2. Reliability of Systems: RAM</b> - Series and Parallel systems - Repairable and Non-repairable systems
	- Exercises / team work
12:00	<i>LUNCH</i>
13:00	<b>3. Reliability and Risk Analysis methods</b> - Overview of the most widely used analysis methods
	<b>4. Reliability of Electronics</b> - Failure modes of electrical components - calculation of MTBF: FIDES, Parts count and MIL-217 methods - Basics of Reliability Testing
14:15	<i>COFFEE break</i>
	- Exercises / team work
	<b>5. Reliability Management</b> - Reliability Engineering activities and timing in Product Development
16:30	<i>CONCLUSIONS, discussion</i>

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**Price:** 1-day or 2-day course                      eur/ person. 1-day separately: eur/ person.

**Cancellation:** Cancellation latest 1 week before, after that 50 % fee is charged.  
 A person may be substituted by another. If the cancellation is not made, the whole fee will be charged.