

# Reliability Academy

www.reliabilityacademy.fi

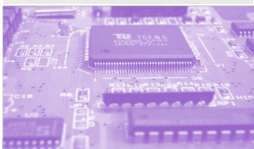
## Webinars and Training Courses



### R01. Reliability Engineering Basics, 1 or 2d

Students will gain a fundamental comprehension of techniques and practical tools essential for product or system design. The webinar will acquaint you with key terms, methodologies, and concepts in Reliability Engineering. The webinar also incorporates calculation examples and exercises for hands-on learning.

**Prior knowledge:** Basic statistical methods.



### R02. FMEA – Failure Modes and Effects Analysis - 1d

Students will learn how to incorporate the FMEA method into product design. The webinar will present the fundamentals of Reliability Analysis, including various techniques and tools, along with the most efficient application methods.

**Prior knowledge:** Basic statistical methods would be helpful.

### R03. Reliability of Electronics – Failure rate computation - 1d

Students will acquire a fundamental knowledge of Electronics Reliability, along with calculation techniques and tools. This will enable them to estimate and strategize the MTBF or Failure rates of electronic products in various operational environments, and incorporate these considerations into product design.

**Prior knowledge:** Basic statistical methods.



### R04. Accelerated Reliability Testing - 1 or 2d

The objective is to equip designers and test engineers with the skills to plan and execute accelerated reliability tests (ALT, AST/HALT) in a practical setting. The webinar will present these methods, complete with examples, for application in product design projects.

**Prior knowledge:** Basic statistics.



### S01. Risk Analysis Basics - 1d

The webinar will introduce the principles of prevalent Risk Analysis methods. Students will learn how to choose appropriate methods for technology projects. Estimations of Risk magnitude will be presented. Discussions will include, how to organize a risk analysis project, using the effective risk management tools and documentation practices.

**Prior knowledge:** Basic statistical methods would be helpful.

### S02. Functional Safety – EN 61508, Application, Calculations - 1 or 2 d

The course provides students with a fundamental comprehension of Functional Safety, as outlined in EN 61508. It introduces techniques and tools for calculating the MTBF and SIL (Safety Integrity Level) of electronic products. Additionally, it highlights the key documents necessary in the context of 'EN 61508'.

**Prior knowledge:** Basic statistical methods.

### S03. Product Assurance Management - 2d

The course covers the fundamentals of Product Assurance (PA) in the development of space-qualified or high-reliability instruments. It will guide students on establishing a PA Management Plan, procedures, and tools that align with space technology standards, such as the ESA ECSS-series. The organization of PA activities will be discussed, including the necessary documentation and practices.

**Prior knowledge:** Project Management.

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*We enable our clients to design superb technology products by eliminating product liability risks.*

Reliability Academy Finland is an independent training organization established in 2008 by top Reliability Experts and Systems Engineers.

**AL Safety Design**

