SQT

TRAINING THAT DEVELOPS
*REAL* CAPABILITY









# Failure Mode & Effect Analysis

**CPI005**

# Failure Mode & Effect Analysis

Failure Mode Effect Analysis is the primary tool used in industry to assess risk both at product design and development stage, and during manufacturing. The overall objective of the analysis is to ensure that the product delivered to the customer is free of defects and will perform to specification. Risks of failure are assessed during analysis. A thorough assessment of potential failure modes and their associated causes/mechanisms will be undertaken in a FMEA, leading to appropriate actions to eliminate as far as possible the failure modes and their corresponding effects.

FMEA's can be complex, so good cooperation and coordination is required within the FMEA teams, and it is important that the analysis is conducted in a carefully structured manner to assure that the work is done efficiently and effectively. Ideally, all team members will have the same understanding of the FMEA process, and are trained to follow a well-structured procedure.

## Duration & Price

Duration: 1 day
Public Virtual Training: €425
Delivery mode: This programme is available In-Company, and via Public Virtual Training

## Dates & Locations

| Date | Venue | |
|---|---|---|
| 11 May 2027 | Virtual | Book Date |

## In-Company Training

Please contact us for more information on our In-Company training options

## What's covered?

The training course is presented both on a public basis and in-company. For the practical-work session described below, the tutor provides a comprehensive case study for the public course. For in-company courses the participants will undertake the analysis of failure modes chosen from their own work environment.

**Introductory Session**

In the introductory session the tutor will use a real FMEA case study to explain in detail the procedure to be followed when undertaking the analysis and how FMEA is used to assess risk at product design and manufacturing stages. This includes the steps to be followed in determining the Risk Priority Number (RPN) and examples of actions taken to eliminate/reduce the risk of failure. The tutor will provide a detailed step by step procedure for the teams to follow in the practical session. The introductory session will include discussion on:

- Design and Process FMEA's
- Forming the FMEA team and utilising effective brainstorming techniques
- Development of a design FMEA and a process FMEA.
- Identification of the causes and effects of failure.
- Determining and understanding the Risk Priority Number.
- The benefit of effective corrective actions in reducing the RPN.

**Practical Team Exercises**

Most of the day will be devoted to a practical team exercise. The teams will work from first principles through the steps of analysing failure modes following the procedure provided by the tutor. The tutor will act as facilitator during this session.

## Who should participate?

- Product, process, design, and R&D engineers and scientists
- Quality engineers and scientists
- Production management

## What will I learn?

Participants achieve the following learning outcomes from the programme;

- Conduct FMEA analysis
- Participate in FMEA teams
- Lead FMEA teams
- Demonstrate understanding of the structure of FMEA analysis which leads to the satisfactory elimination of the causes of failure modes

## How do we train and support you?

**In-House Courses**

For In-House courses, the tutor will contact you in advance to discuss the course programme in more detail in order to tailor it specifically for your organisation. On practical team exercises, participants will be grouped in small teams and they will undertake analysis of failure modes selected from their own processes, following a detailed procedure provided by the tutor. The tutor will act as facilitator for the teams.

**Course Manual**

Participants will be provided with a very comprehensive course reference manual, which explains in detail how to undertake a FMEA. The manual includes a fully worked FMEA as an example. The worked examples will provide useful references for the participants undertaking FMEA when they return to their workplace.

## Tutors



**Albert Plant**
View Profile



**Grainne Heneghan**
View Profile

## What Our Learners Say

We believe in excellence through transparency and continuous improvement. That's why we invite all our delegates to share their experiences on CourseCheck.com, an independent platform dedicated to genuine, unfiltered feedback. Learner insights help us not only to enhance our training programmes but also empower potential learners to make informed decisions. Click on the link below to read firsthand experiences and testimonials from past learners.




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- Leadership & Personal Development
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SQT Training Ltd. | T: +353 61 339040 | E: info@sqt-training.com
W: sqt-training.com

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