

# Aerospace Process Failure Mode and Effects Analysis (PFMEA) with Design FMEA Consideration Training Course

Training course



# Essential information about the course

FMEA is often mandated in the aerospace industry as a specific requirement to support the goal of defect prevention and the reduction of variation and waste.

This course will help you to learn how FMEA can be used to evaluate the risks and determine appropriate actions in a manufacturing process environment. The course gives consideration to applying the same principles in product design.

This one-day course provides an overview of the methodology used to develop and implement process and design FMEA; detailing the critical steps to identify and mitigate process and product risks. Whilst the course is based around AS13004:2017 and gives emphasis to Process FMEA, consideration is given into how the same principles can be applied in the context of Design FMEA.

## Our course agenda

- Potential Failure Mode and Effects Analysis (FMEA)
  - Introduction
  - FMEA development, structure & approach
  - scope
- Process failure mode and effects analysis and AS13004:2017
  - Introduction
  - Dependencies and pre-requisites
  - Process flow diagram
  - PFMEA overview and layout
  - Control plans
  - Maintaining and leveraging PFMEAs
- Design failure mode and effects analysis
  - Team approach
  - Manufacturing and assembly considerations
  - Block and parameter diagrams
  - DFMEA overview and layout

Upon successful completion of your course, you'll receive an internationally recognized BSI certificate

# Make sure the course is right for you

## Who is this course for?

Anyone involved in process and product development activities, either as a team member or leading the activities, AS/EN/JISQ 9100 auditors, anyone interested in learning more about FMEA, and anyone involved in the implementation of AS/EN/JIS Q9100.

What will I learn?	What are the benefits?
<ul> <li>Delegates will have the knowledge to:</li> <li>Recognize the activities involved in the development of an FMEA (emphasis on PFMEA using AS13004:2017)</li> <li>Identify failure modes and apply risk rankings to severity, occurrence and detection</li> <li>Assign risk priority numbers (RPN) to each failure mode identified</li> <li>Determine actions to reduce or eliminate high RPN's</li> <li>Delegates will have the skills to: <ul> <li>Become a productive member of a process or product design team</li> <li>Apply the steps involved for a successful FMEA</li> </ul> </li> </ul>	<ul> <li>This course will help you:</li> <li>Identify the different types of FMEA and their application</li> <li>Recognize how to identify failure modes</li> <li>For PFMEA - Know how to assess and prioritize risks associated with manufacturing processes using severity, occurrence and detection rankings</li> <li>Interpret the risks identified from PFMEA events and determine appropriate input into manufacturing activities, reaction and control plans</li> <li>For DFMEA – Understand the similarities and differences in the use of FMEA techniques as they apply to the design process</li> </ul>

Prerequisites - you are expected to have the following prior knowledge:

There are no formal prerequisites for this course.

## Why invest in training from BSI?

We want to make sure you have the best learning experience possible. That's why we offer a range of training courses from beginner to expert. We create a positive learning environment so you retain the knowledge and acquire the skills that will continue to be of use beyond the course.

When you attend a BSI training course, our tutors are the best in the business. They're truly passionate about sharing their knowledge and ensuring you learn. Trusted experts with years of hands-on and business experience, they bring the subject matter to life with relevant and contemporary examples to enhance your learning.

Training delivered at your site could be a convenient and cost-effective option, especially if you have multiple delegates. Talk to one of our experts to find out more.

#### Next steps with the BSI Academy

Want to learn more?

You may also be interested in attending other core tools training courses, such as: AS9145 Advanced Product Quality Planning (APQP) and Product Part Approval Process (PPAP), AS9102 First Article Inspection (FAI), Measurement Systems Analysis (MSA) and Statistical Process Control (SPC).



**BSI Group** Kitemark Court Davy Avenue, Knowlhill Milton Keynes, MK5 8PP Find out more Call: **+44 (0)345 086 9000** Email: **training@bsigroup.com** or visit: **bsigroup.com/training**