

AIAG & VDA FMEA 1st Edition (2019)

Course Description

A Core Tool of the APQP process, Failure Mode and Effects Analysis (FMEA) is an analytical methodology that employs the evaluation and assessment of risk to ensure that potential problems have been considered and addressed throughout the product and process development process.

The AIAG & VDA FMEA 1st Edition Handbook was released in 2019 and incorporates best practices from both:

- AIAG – Automotive Industry Action Group
- VDA – German Associate of the Auto Industry

This course provides a detailed look at AIAG & VDA FMEA 1st Edition and provides participants with the knowledge and skills necessary to understand and interpret the requirements for their respective companies and how to develop and implement FMEAs within their organization's operations.

Who Should Take It

- Quality Managers and Quality Team Leaders
- Individuals with direct involvement in product and process design.
- Individuals / team members wanting a better understanding of the quality planning process.

Learning Objectives

Through a combination of presentation, discussion and group exercises, participants will gain a working knowledge of the following elements that are based on AIAG & VDA FMEA 1st Edition (2019) requirements:

Introduction to the Role of FMEA in Quality Planning

- History, purpose, uses and definitions.
- When FMEAs are performed and who should be involved.

Transition from 4th Edition FMEA to AIAG & VDA FMEA 1st Edition

- Overview of the major changes, improvements, and benefits of the AIAG & VDA FMEA 1st Edition (2019) as compared to the AIAG 4th Edition.

Design FMEA (DFMEA)

- Uses and benefits.
- Applying the 7-step approach to creating a Design FMEA.
- Use of diagrams (Boundary Diagram, Parameter Diagram, etc.).
- Review of Design FMEA forms and steps in their use.
- DFMEA Severity, Occurrence and Detection Criteria.
- Linkages from Design FMEA to Process FMEA.
- Follow-up actions.
- Workshop exercise in Design FMEA.

Process FMEA (PFMEA)

- Uses and benefits.
- Applying the 7-step approach to creating a Process FMEA.
- Review of Process FMEA forms and steps in their use.
- PFMEA Severity, Occurrence and Detection Criteria
- Linkages of Process Flow and PFMEA to Control Plan and Work Instructions.
- Follow-up actions.
- Workshop exercise in Process FMEA.

FMEA Implementation

- Guidance on steps and best practices for the effective implementation of an AIAG & VDA FMEA program OR transition of FMEA activities from AIAG 4th Edition.

Prerequisites

None. This is an introductory course.

Previous experience with risk assessment tools and techniques is beneficial but not required.

Experience with previous editions of FMEA (e.g. AIAG 4th Edition) is beneficial but not required.

This course is equally suitable for the implementation of a new FMEA program or transition from AIAG 4th Edition to AIAG & VDA FMEA 1st Edition.

Location

- Public Course
- On-Site

Duration

2 Days