

Boundary & Parameter Diagrams in AIAGVDA FMEA

Objective

The objective of this course is to equip participants with the knowledge and practical skills to develop and apply Boundary and Parameter Diagrams as part of the AIAG/VDA 7-Step DFMEA methodology. The training enables participants to visualize system structure, interfaces, and variation paths, translating these insights into robust, measurable function statements that strengthen DFMEA quality and traceability.

Content

- Overview of AIAG/VDA 7-Step DFMEA
- Understanding the Role of Boundary and Parameter Diagrams (Steps 2 & 3)
- Constructing Boundary Diagrams to Define Scope and Interfaces
- Building Parameter Diagrams for Variation and Robustness Analysis
- Linking Diagrams to DFMEA Function Statements
- Case Study: 12V Battery System
- Group Exercise and Review of Diagram Quality

Duration

1 Day

Assessment

Participants will complete:

- A multiple-choice knowledge assessment
- Observation and output-based evaluations during practical sessions

Successful candidates will receive a Certificate of Competence.

Pre-requisites

Basic understanding of DFMEA principles and the AIAG/VDA FMEA methodology.
Prior exposure to functions, failure modes, and design documentation is beneficial.

Target Audience

- DFMEA Moderators
- Design, Quality, and Process Engineers
- Product Development and Systems Engineers
- Advanced Practitioners of FMEA and Core Tools

Training Methodology

The course uses a combination of:

- Instructor-led presentations
- Interactive group discussions and feedback
- Group-based diagram construction and analysis
- Case study applications