



FAILURE MODE AND EFFECT ANALYSIS (FMEA) TRAINING



MTBM Group Sdn. Bhd. (1600656-M)

Level 8, MCT Tower, Sky Park, One City, Jalan USJ 25/1, 47650 Subang Jaya, Selangor

Course Title: Failure Mode and Effect Analysis (FMEA) Training

Course Validity: 2 Days

Validity: Not Applicable

HRD Corp Scheme: Claimable

INTRODUCTION

This 2-day training program provides participants with a structured approach to identifying potential failures in processes, products, or systems using Failure Mode and Effect Analysis (FMEA). The course emphasizes practical tools and techniques to mitigate risks, improve reliability, and enhance product and process quality.

OBJECTIVE(S):

- Understand the purpose and principles of FMEA.
- Learn to identify failure modes and assess their impact on systems.
- Develop skills to prioritize risks using the Risk Priority Number (RPN).
- Gain practical knowledge of implementing FMEA in organizational processes.
- Foster a proactive approach to risk management and continuous improvement.

TARGET GROUP(S):

- Quality assurance and engineering teams.
- Supervisors and process improvement personnel.
- Product and system design teams.
- Employees involved in risk assessment and reliability analysis.

ENTRY REQUIREMENT(S):

- Able to read, write, and communicate verbally in Malay/English.

TOPIC(S):

1. Introduction to Failure Mode and Effect Analysis (FMEA).
2. Types of FMEA: Process, Design, and System FMEA.
3. Steps to Conduct an FMEA.
4. Calculating and Interpreting the Risk Priority Number (RPN).
5. Developing Action Plans and Monitoring Improvements.

LIST OF REFERENCE BOOK(S):

- "Effective FMEAs" by Carl S. Carlson.
- AIAG & VDA FMEA Handbook.

LIST OF TEACHING AID(S):

- FMEA templates and software.
- Case studies for practical exercises.
- LCD projector and computer.
- Whiteboard with accessories.

METHODOLOGY(S):

- Lecture.
- Group discussions and brainstorming sessions.
- Hands-on exercises on creating FMEA.
- Case study analysis on risk mitigation using FMEA.

TRAINING SCHEDULE

Day 1

Time	Activity/Topic
8:30 am - 9:00 am	Registration and Introduction
9:00 am - 10:30 am	Topic 1: Introduction to Failure Mode and Effect Analysis (FMEA)
10:30 am - 10:45 am	Morning Tea Break
10:45 am - 12:30 pm	Topic 2: Types of FMEA: Process, Design, and System FMEA
12:30 pm - 1:30 pm	Lunch Break
1:30 pm - 3:30 pm	Topic 3: Steps to Conduct an FMEA
3:30 pm - 3:45 pm	Afternoon Tea Break
3:45 pm - 5:00 pm	Group Activity: Identifying Failure Modes in a Process

TRAINING SCHEDULE

Day 2

Time	Activity/Topic
8:30 am - 9:00 am	Recap of Day 1
9:00 am - 10:30 am	Topic 4: Calculating and Interpreting Risk Priority Number (RPN)
10:30 am - 10:45 am	Morning Tea Break
10:45 am - 12:30 pm	Topic 5: Developing Action Plans and Monitoring Improvements
12:30 pm - 1:30 pm	Lunch Break
1:30 pm - 3:30 pm	Practical Exercise: Completing an FMEA Template
3:30 pm - 3:45 pm	Afternoon Tea Break
3:45 pm - 5:00 pm	Case Study: Successful FMEA Implementation Examples