



## One Day Training Program on FMEA

Jointly organizing by ATIRA and Ahmedabad University



Ahmedabad  
University



Day/Date: 24<sup>th</sup> April 2024/Wednesday

Expert: Shri N C Sharma, Prof. of Practice Ahmedabad University, Ex-HAL, TVS and TAML

Venue: ATIRA, Ahmedabad

Fees: ₹ 2360.00 (₹ 2000+18% GST)

Registration Link: <https://forms.gle/LoHUUMFqkqwCzeSC6>

Bank Details for NEFT/RTGS		For UPI payment	
Account holder's name	: Ahmedabad Textile Industry's Research Association		ATIRA +91 79905 90718
Bank name	: Kotak Mahindra Bank Limited	or	
Branch name and address	: Satellite Branch Shop No. 6 - 7, Shidhivinayak Complex, Shivranjini Char Rasta, Satellite, Gujarat, India		
Type of account	: Savings Account		7990590718@okbizaxis
Account number	: 7212148230		
RTGS/NEFT IFSC Code	: KKBK0000810		

### Course Description

FMEA (Failure Mode Effect Analysis) is design tool used to assure that the design failure modes and their associated causes are identified and counter measures are taken for realizing a Robust-Design”

FMEA Course will explain the importance FMEA. The course will illustrate the step-by-step method with practical examples.

Each participant will have the opportunity to develop all the elements of a Design and Process FMEA, including use of robustness tools, **Process Flow Charts** and **Control Plans**. All activities will include industry-specific examples and terminology.

Participants will learn how to assess risk and determine the levels of risk that trigger mitigation actions. Action plans derived from FMEAs and methods to manage FMEA data for future use are also covered in detail. Participants can expect team activities and relevant exercises in a workshop format.

***Bring your own Design / Process problems and Case Study to do live during workshop and benefit.***

### FMEA Training Course Objectives

The objectives of Quality-One FMEA onsite training courses are to:

- Basic Elements of FMEA and Advantages
- Link FMEA to **Product Design & Development Process**

- Participate in the development of a Design and Process FMEA
- Define risk and determine levels of risk requiring mitigation.
- Set up an effective **Cross Functional Team (CFT)** required for FMEA Development
- Efficiently select Severity, Occurrence and Detection rankings
- Implement a **Risk Priority Number (RPN)** reduction process
- Determine design and process special characteristics
- Understand the different types of FMEAs
  - System & Subsystem
  - Component
  - Manufacturing
- Create and manage action plans derived from FMEA
- Manage and store FMEA content for future use
- Understand links between FMEA and problem-solving method

## **Course outline**

### FMEA Process Overview

- Design meeting quality objectives
- The history and purpose of FMEA
- Why and when to do FMEA
- Limitation of FMEA

### FMEA Methodology

- Step-by-Step FMEA Process
- System / subsystem / component FMEA
- Illustration with practical industry examples
- Identifying Risks and Risk mitigation plan and monitoring?
  - Criticality (Severity X Occurrence)
  - **Risk Priority Number (RPN)** and its use
  - When to take action and developing action plans.

### **FMEA Reporting and Documentation**

- Components of an FMEA report: Scope, team members, methodology, findings, recommendations
- Guidelines for creating clear and concise FMEA documentation
- Integration of FMEA findings into organizational processes (e.g., quality management systems)

### Practical application of the FMEA technique

### **Q&A and Conclusion**

- Open forum for questions and clarifications
- Summary of key takeaways from the training
- Next steps: Follow-up support, resources, and further learning opportunities
- Feedback collection from participants for continuous improvement

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