



Crystal Lean Solutions

**Training**  
Academy

# FMEA



# FMEA

<b>DURATION:</b>	1 Day
<b>ACCREDITATION:</b>	Crystal Lean Solutions
<b>COURSE CODE:</b>	1095

## AIM:

The aim of the FMEA programme is to provide participants with the knowledge and skills to proactively identify, assess, and mitigate potential failure modes in processes, products, or systems to enhance reliability and reduce risk.

## OBJECTIVES:

At the end of the course, learners will be able to:

- ✿ Understand the purpose and benefits of FMEA in risk management.
- ✿ Learn the step-by-step FMEA process and key terminology.
- ✿ Identify potential failure modes, their causes, and effects.
- ✿ Prioritise risks using Risk Priority Numbers (RPN).
- ✿ Develop effective action plans to reduce or eliminate failure risks.

## THIS PROGRAMME IS FOR:

The FMEA programme is suitable for professionals involved in quality, engineering, and risk management roles, including but not limited to:

- ✿ Quality Engineers and Technicians
- ✿ Design and Process Engineers
- ✿ Manufacturing and Production Teams
- ✿ Project Managers
- ✿ Risk and Compliance Professionals

## **PROGRAMME CONTENT:**

### **1. Introduction to Problem Solving**

### **2. Overview of a Process**

### **3. Introduction to rapid problem solving**

### **4. 6M's**

### **5. Cause Types: Direct, Contributing and Root Cause**

### **6. Introduction to FMEA**

- ✿ Purpose, benefits, and when to use FMEA
- ✿ Key terminology (failure modes, effects, causes, severity, occurrence, detection)

### **7. The FMEA Process**

- ✿ Step-by-step approach to completing an FMEA
- ✿ Mapping the process and identifying potential failure modes
- ✿ Analysing causes and effects

### **8. Risk Prioritisation**

- ✿ Scoring severity, occurrence, and detection
- ✿ Calculating and interpreting the Risk Priority Number (RPN)

### **9. Action Planning**

- ✿ Developing corrective and preventive actions
- ✿ Assigning ownership and tracking progress

### **10. Practical Application**

- ✿ Completing an FMEA example
- ✿ Reviewing results and identifying improvement opportunities

<b>ASSESSMENT:</b>	None
<b>GRADING:</b>	Not Applicable
<b>PROGRAMME DELIVERY:</b>	Classroom
<b>TOTAL DURATION OF THE PROGRAMME INCLUDES:</b>	1 Day
<b>CERTIFICATION CRITERIA:</b>	Completion of all training days on programme
<b>CERTIFICATION BODY:</b>	Crystal Lean Solutions
<b>RECOGNITION OF PRIOR LEARNING (RPL):</b>	N/A
<b>PRE-REQUISITE:</b>	None

### **OTHER COURSES OF INTEREST FROM THE CLS TRAINING ACADEMY:**



- ✿ Measurement System Analysis (MSA)
- ✿ A3 Problem Solving
- ✿ Human Error Problem Solving
- ✿ Process Capability
- ✿ 5S
- ✿ Lean Six Sigma Yellow Belt
- ✿ Lean Six Sigma Green Belt