

## ROOT CAUSE FAILURE ANALYSIS (RCFA) FOR ENGINEERS

<b>Start Date:</b>	30/11/2026	<b>End Date:</b>	04/12/2026
<b>Categories:</b>	Engineering & Maintenance	<b>Venues:</b>	London
<b>Formats:</b>	In Person	<b>Instructors:</b>	

### OVERVIEW

This course provides in-depth techniques and structured approaches to identify the root causes of equipment and system failures. It equips engineers with the tools to investigate incidents and implement effective corrective actions.

### OBJECTIVES

By the end of this course, participants will be able to:

- Apply systematic root cause analysis methodologies (5 Whys, Fishbone, FMEA).
- Identify failure modes and their contributing factors.
- Analyze data and evidence to trace the root cause.
- Develop and implement sustainable corrective actions.
- Improve reliability and reduce repeat failures through lessons learned.

### COURSE OUTLINE

1. Principles and Benefits of Root Cause Analysis
2. Failure Modes and Effects Analysis (FMEA)
3. Investigation Techniques and Evidence Gathering
4. Root Cause Identification Tools (Ishikawa, 5 Whys, Fault Tree)
5. Corrective Action Planning and Case Studies

### TARGET AUDIENCE

Maintenance and reliability engineers, technical managers, and plant supervisors responsible for asset performance and failure prevention.

### METHODOLOGY

Case studies, group investigations, RCA tools application workshops, and field data analysis.

### CONCLUSION

Participants will be equipped to lead structured failure investigations and implement effective long-term solutions.

### DAILY AGENDA

## **Day 1: Introduction to RCFA Principles**

Understanding failures, RCA frameworks, and failure reporting practices.

## **Day 2: Failure Modes and Mechanisms**

Learning mechanical, electrical, and process-related failure causes.

## **Day 3: RCFA Tools and Techniques**

Using 5 Whys, Fishbone diagrams, and Fault Tree Analysis.

## **Day 4: Investigation and Documentation**

Gathering evidence, analyzing trends, and team investigation.

## **Day 5: Developing Corrective Actions**

Building action plans and verifying effectiveness of implemented solutions.

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*For more information, please contact us:*

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