

# Root Cause Failure Analysis

## Venue Information

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**Venue:** London UK

**Place:**

**Start Date:** 2026-08-18

**End Date:** 2026-08-22

## Course Details

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**Net Fee:** £4750.00

**Duration:** 1 week

**Category ID:** METC

**Course Code:** METC-13

## Syllabus

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### **courses Syllabus**

#### **Introduction**

Our highly interactive Root Cause Failure Analysis program offers a modern approach to problem-solving in maintenance management. Based on recent research, participants will learn practical techniques rooted in first principles to enhance operational performance.

#### **Objectives**

Upon completion of this program, participants will be able to:

1. Develop and implement a sustainable world-class maintenance strategy.
2. Perform systematic Root Cause Failure Analysis.
3. Enhance understanding of various maintenance environment variables and their relationships.
4. Audit and optimize maintenance processes.

### **Day 1 – Problem Solving – Basic Principles**

- Problem Identification and Terminology
- Decision Logic and Knowledge Types
- Maintenance Maturity Indexing
- Continuous Improvement Principles
- Exercises

### **Day 2 – Sustainable Maintenance Performance Improvement 1**

- Modern Maintenance Practices Introduction
- SQC Performance Model
- Reverse Risk Analysis
- Maintenance/Operations Objectives Analysis
- Complexity, Risk, and Variability Models
- Delegate Problem Solving
- Exercises

### **Day 3 – Sustainable Maintenance Performance Improvement 2**

- Cross-Referencing Operational Variables
- Maintenance Cost Ratio Analysis
- Data Maturity Stages
- Logical vs. Creative Problem Solving
- Case Studies and Exercises

### **Day 4 – Root Cause Analysis**

- Maintenance Strategy Development
- Pitfalls in Maintenance Improvement Initiatives
- Problem Solving Techniques
- Root Cause Failure Analysis Methodology
- Exercises

### **Day 5 – Action Plan Development**

- Introduction to TRIZ Methodology
- Review of Problem-Solving Techniques
- Development of Instant Problem-Solving Approach
- Application of Standard Questions

