London TDM

Engineering and Technical Skills Training Courses

Course Venue: United Arab Emirates - Dubai

Course Date: From 25 January 2026 To 29 January 2026

Course Place: Downtown Dubai

Course Fees: 5,000 USD

Introduction

Root Cause Failure Analysis (RCFA) is a systematic approach to identify the underlying causes of failures in products, processes, or systems. This professional 5-day course is designed to equip participants with the skills and knowledge necessary to conduct effective root cause analyses, develop solutions, and prevent recurrence of issues. By the end of this course, participants will be able to apply RCFA methodologies to improve reliability and performance in their respective fields.

- Understand the principles and value of Root Cause Failure Analysis.
- Learn various RCFA methodologies and tools.
- Gain expertise in identifying and categorizing root causes of failures.
- Develop skills to propose and implement corrective actions.
- Build a culture of continuous improvement within your organization.

Course Outlines

Day 1: Introduction to Root Cause Failure Analysis

- Overview of failure analysis and its importance
- Key concepts and terminologies in RCFA
- The RCFA process: A step-by-step guide
- Examples of successful failure analyses
- Introduction to case study projects

Day 2: Fundamental Tools and Techniques

- Pareto Analysis for prioritizing problems
- 5 Whys Analysis: Uncovering layers of cause
- Fishbone Diagram: Visualizing potential causes
- Failure Mode and Effects Analysis (FMEA)
- Hands-on exercises with sample data

Day 3: Advanced Analysis Methods

- Fault Tree Analysis: Exploring cause-effect relationships
- Event and Causal Factor Charting
- Root cause validation techniques
- Introduction to software tools for RCFA
- Case study group work and presentations

Day 4: Implementing Corrective Actions

- Developing effective corrective action plans
- Obstacle identification and overcoming resistance
- Monitoring and measuring results of corrective actions
- Documentation and reporting of RCFA findings
- Best practices in communication and teamwork

Day 5: Building a Culture of Continuous Improvement

- Integrating RCFA into organizational processes
- Training and empowering employees
- Building a proactive and preventive mindset
- Evaluating and iterating on RCFA processes
- Final project presentations and feedback session