



TRAIN DEVELOP
EMPOWER

TRAIN • DEVELOP • EMPOWER

IN-HOUSE CORPORATE TRAINING

ROOT CAUSE ANALYSIS & FAILURE INVESTIGATION

Develop structured Root Cause Analysis capabilities that support effective failure investigations, problem-solving, continuous improvement and implementation of sustainable corrective actions.



COURSE CODE

MNT-003



DURATION
3-5 Days



DELIVERY
On-site / Virtual



PARTICIPANTS
10-25 per session



CERTIFICATE
Certificate of Completion



CUSTOMIZABLE
Yes - Tailored to Your Needs

[REQUEST PROPOSAL →](#)

WHY THIS PROGRAMME?



FIND ROOT CAUSES

Apply structured RCA and investigation methods.



PREVENT RECURRENCE

Identify systemic causes and operational risks.



CORRECT EFFECTIVELY

Develop sustainable corrective and preventive actions.



IMPROVE RELIABILITY

Reduce recurring failures and performance losses.

IN-HOUSE DELIVERY OPTIONS

- ✓ Onsite at client premises
- ✓ Live virtual instructor-led format
- ✓ Hybrid delivery format
- ✓ Customized duration based on organizational requirements

INDUSTRIES WE SERVE

- ✓ Oil & Gas
- ✓ Petrochemicals
- ✓ Manufacturing
- ✓ Mining & Metals
- ✓ Utilities
- ✓ Logistics & Transportation
- ✓ Infrastructure
- ✓ Government & Public Sector

WHY CHOOSE TRAIN DEVELOP EMPOWER?



20+
YEARS
EXPERIENCE



35+
COURSES IN
7 CATEGORIES



100%
CUSTOMIZED
SOLUTIONS



ON-SITE OR
VIRTUAL
DELIVERY



INDUSTRY
EXPERT
FACILITATORS

COURSE OVERVIEW

Organizations often address symptoms rather than underlying causes of failures, resulting in repeated downtime, increased costs, safety incidents, and reduced performance. Recurring failures require disciplined investigation and systemic problem-solving.

This program develops structured RCA capability for effective failure investigations, evidence analysis, root-cause identification, corrective action development, and prevention of recurrence.

Business Challenges Addressed

- > Recurring equipment failures
- > Repeated maintenance issues
- > High operational downtime
- > Ineffective corrective actions
- > Safety incidents and near misses
- > Poor problem-solving practices
- > Lack of structured investigation processes
- > Inadequate failure reporting and analysis
- > Increased maintenance and operating costs
- > Lost productivity due to recurring disruptions

Key Learning Outcomes

- > Apply structured Root Cause Analysis methodologies
- > Conduct effective failure investigations
- > Identify immediate, contributing, and root causes
- > Analyze equipment and operational failures
- > Use proven RCA tools and techniques
- > Develop effective corrective and preventive actions
- > Improve organizational problem-solving capability
- > Reduce recurring failures and downtime
- > Strengthen reliability and operational performance
- > Support continuous improvement initiatives

WHO SHOULD ATTEND

Maintenance Managers

Maintenance Engineers

Reliability Engineers

Operations Managers

Production Supervisors

Asset Managers

Quality Professionals

HSE Professionals

Technical Specialists

Investigation Personnel

TRAINING METHODOLOGY

Interactive learning approaches support practical application and can be customized to the organization's environment, industry, and participant experience.

ID Instructor-Led Discussions

ICS Industry Case Studies

PIE Practical Investigation Exercises

GW Group Workshops

FAA Failure Analysis Activities

SL Scenario-Based Learning

PW Problem-Solving Workshops

ITE Interactive Team Engagement

COURSE MODULES

01 Foundations of Root Cause Analysis

- Introduction to Root Cause Analysis
- Understanding failures and operational problems
- Importance of effective investigations
- Types of causes and contributing factors
- RCA principles and frameworks
- Benefits of systematic problem-solving

02 Failure Investigation Methodologies

- Investigation planning and preparation
- Gathering evidence and information
- Interviewing techniques
- Data collection methods
- Event and timeline analysis
- Failure documentation practices

03 Root Cause Analysis Tools & Techniques

- The 5 Whys methodology
- Cause-and-effect diagrams
- Fishbone analysis
- Fault Tree Analysis fundamentals
- Pareto analysis techniques
- Barrier analysis
- Selecting the appropriate RCA tool

04 Developing Corrective & Preventive Actions

- Identifying effective corrective actions
- Preventive action planning
- Action prioritization techniques
- Risk reduction strategies
- Verifying action effectiveness
- Monitoring implementation progress
- Preventing recurrence of failures

05 Building Sustainable RCA Programs

- Integrating RCA into organizational processes
- Reliability improvement initiatives
- Performance measurement and reporting
- Lessons learned management
- Continuous improvement practices
- RCA governance and accountability



TAILORED TO YOUR NEEDS

Modules can be customized to align with your industry, operational environment, and participant experience.

[DISCUSS CUSTOMIZATION](#)



SCAN TO VIEW COURSE PAGE



READY TO ELIMINATE RECURRING FAILURES & IMPROVE RELIABILITY?

Partner with Train Develop Empower to build a resilient, agile and future-ready supply chain. Let's create lasting impact together.

[REQUEST PROPOSAL](#) →



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