



*Training Course:
Investigating and Prevention of Failure*

31 August - 4 September 2025

Dubai (UAE)

Residence Inn by Marriott Sheikh Zayed Road, Dubai

Training Course: Investigating and Prevention of Failure

Training Course code: HE236144 From: 31 August - 4 September 2025 Venue: Dubai (UAE) - Residence Inn by Marriott
Sheikh Zayed Road, Dubai Training Course Fees: 4900 € Euro

Introduction

In complex systems, organizations must understand how and why failures occur to prevent costly disruptions, reduce safety hazards, and improve long-term operational performance. This training program, designed by Global Horizon Training Center, provides a structured approach to identifying, analyzing, and mitigating failure causes in systems, processes, and equipment. Participants will gain the tools and techniques required to conduct root cause analyses, implement effective preventive measures, and foster a culture of continuous improvement.

Objectives

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

- Understand the various types and causes of failures in systems and operations
- Apply structured methods such as Root Cause Analysis RCA and Failure Modes and Effects Analysis FMEA
- Develop preventive strategies and corrective actions
- Analyze data and trends to detect early warning signs of potential failure
- Enhance organizational resilience by improving failure response protocols
- Strengthen internal processes and reduce downtime or repeated failures

Course Methodology

- Interactive instructor-led sessions
- Real-world case studies and incident debriefs
- Group discussions and scenario-based exercises
- Hands-on application of RCA, FMEA, and fault tree analysis tools
- Self-assessment and action planning

Organizational Impact

Organizations that implement failure investigation and prevention strategies will benefit from:

- Reduced operational disruptions and maintenance costs
- Improved workplace safety and regulatory compliance
- Enhanced equipment reliability and asset management
- Increased employee awareness and accountability
- Strengthened decision-making and continuous improvement processes

Target Audience

This course is ideal for:

- Maintenance and Reliability Engineers
- Quality Assurance and Safety Managers
- Risk Management and Compliance Officers
- Technical Supervisors and Plant Managers
- Project Engineers and Operational Excellence Professionals
- Anyone responsible for equipment, process reliability, or safety investigations

Outline

Day 1: Introduction to Failure Investigation

- Types of failures: mechanical, human, systemic
- Concepts of reliability and failure
- Introduction to failure analysis methodology
- The role of failure investigations in risk management

- Overview of international standards and best practices

Day 2: Root Cause Analysis RCA

- Principles and importance of RCA
- Steps in conducting RCA effectively
- Tools and techniques 5 Whys, Fishbone diagram, Pareto Analysis
- Group activity: Conducting an RCA on a case study
- Documentation and reporting failures

Day 3: Failure Modes and Effects Analysis FMEA

- Understanding FMEA: Structure, use, and scoring
- Risk Priority Number RPN and severity assessment
- Application in design, process, and systems
- Proactive failure prevention using FMEA
- Workshop: Building a basic FMEA for a real-world process

Day 4: Prevention Strategies and Process Improvement

- Preventive and corrective actions
- System redesign and process modifications
- Human factor analysis and training needs
- Monitoring and control plans
- Case study: Lessons learned and improvements implemented

Day 5: Organizational Integration and Continuous Improvement

- Integrating failure prevention into operations and strategy
- Building a failure-prevention culture
- Communication and stakeholder engagement
- KPIs and performance metrics for failure reduction

- Final exercise: Simulation of investigation and improvement planning

Registration form on the Training Course: Investigating and Prevention of Failure

Training Course code: HE236144 **From:** 31 August - 4 September 2025 **Venue:** Dubai (UAE) - Residence Inn by Marriott Sheikh Zayed Road, Dubai **Training Course Fees:** 4900 € Euro

Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

Delegate Information

Full Name (Mr / Ms / Dr / Eng):
Position:
Telephone / Mobile:
Personal E-Mail:
Official E-Mail:

Company Information

Company Name:
Address:
City / Country:

Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng):
Position:
Telephone / Mobile:
Personal E-Mail:
Official E-Mail:

Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
- ☐ Please invoice my company

Easy Ways To Register

Telephone:
+201095004484 to
provisionally reserve your
place.

Fax your completed
registration
form to: +20233379764

E-mail to us :
info@gh4t.com
or training@gh4t.com

Complete & return the
booking form with cheque
to: Global Horizon
3 Oudai street, Aldouki,
Giza, Giza Governorate,
Egypt.