



Equipment Reliability Management

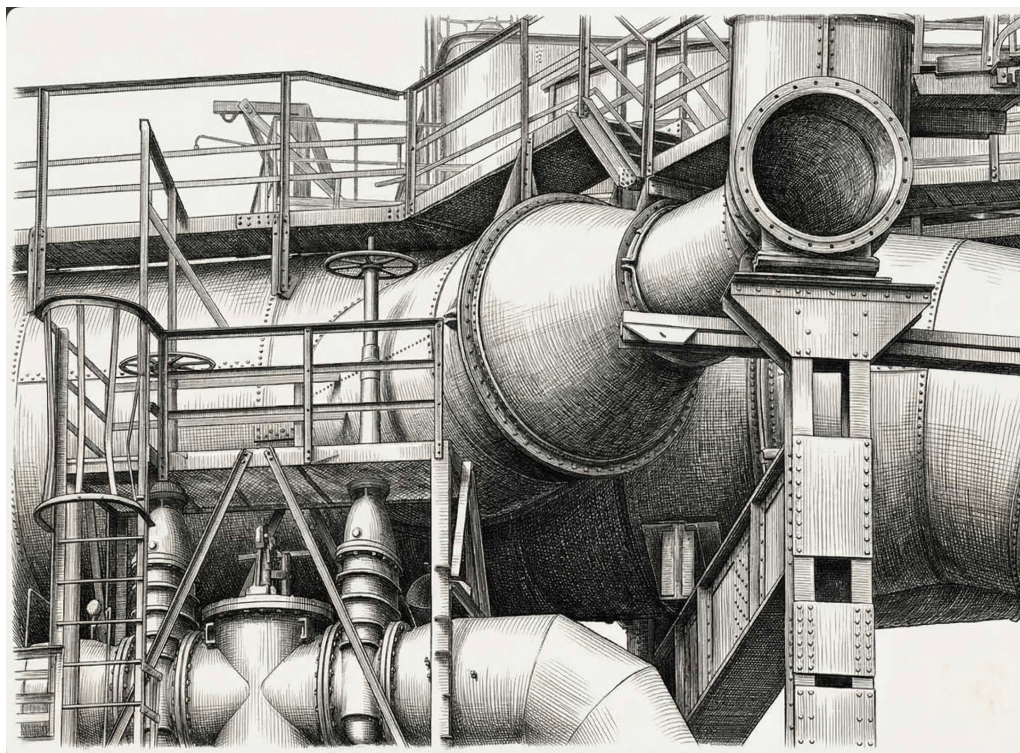
4
Day Program

19500
USD

2
Group

Course outlines

- *Industrial Asset Management*
- *Asset Management and Maintenance*
- *Reliability Management*
 - *Key Reliability Indicators*
- *Risk Management and Risk Matrix*
- *Maintenance and Repair Planning*
- *Maintenance Tactics*
 - *Reliability Assessment and Analysis*
 - *Reliability-Centred Maintenance*
- *Failure Modes and Failure Consequences*
- *Equipment Fault Diagnostics*
- *Forecasting and Modelling*
- *Equipment Performance Indicators*
- *Equipment Turnover and Efficiency*
 - *Cost Reduction and Service Life Extension*
- *Maintenance and Repair Strategy*
- *Work Completion and Reporting*
- *Roles and Competencies in Asset Management*



EQUIPMENT RELIABILITY MANAGEMENT PROGRAM

Reliable equipment is essential for operational stability, production continuity and long-term asset performance. This 4-day programme helps maintenance, reliability, operations and asset management professionals improve equipment reliability through structured maintenance planning, risk-based decision-making, RCM methodology, diagnostics, forecasting and performance improvement.

Participants will learn how to assess equipment-related risks, evaluate failure probability and consequences, develop risk matrices, select appropriate maintenance tactics and optimise maintenance tasks across the asset lifecycle.

Bii Research delivers competency-based industrial training programmes combining international best practices, practical case discussions and applied tools to improve equipment availability, reduce costs and extend equipment service life.

Course Venue

Aktogay - Kazakhstan

Course Date

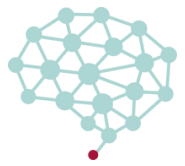
From X to X 2026

Course Place

In-House

Course Fees

COURSE OVERVIEW



This interactive training course provides a comprehensive understanding of Equipment Reliability Management within the broader framework of industrial asset management and maintenance.

The programme explains the relationship between asset management and maintenance, the concept and purpose of maintenance, and the role of reliability in asset management processes. Participants will learn how to define reliability management goals and objectives, apply key reliability indicators, assess equipment-related risks, develop risk matrices, select maintenance tactics, and implement reliability objectives through maintenance and repair planning. The course also covers reliability assessment and analysis, Reliability-Centred Maintenance, failure modes, failure consequences, forecasting and modelling, equipment fault diagnostics, equipment performance indicators, cost reduction, service life extension, maintenance and repair strategy development, work completion and reporting. The programme is designed for professionals responsible for improving equipment reliability, increasing operational stability, reducing maintenance costs and extending the service life of industrial assets.

RETURN ON INVESTMENT

- **EARN** a professional certificate in Equipment Reliability Management
- **GET** clearer direction for maintenance and reliability improvement
- **IMPROVE** equipment availability and operational stability within your organisation
- **GAIN** practical reliability management skills applicable across plants and industrial sites
- **ASSIST** in career development and professional progression
- **ACHIEVE** greater job effectiveness in maintenance, reliability and asset management roles
- **MINIMISE** knowledge gaps in risk-based maintenance, RCM and reliability indicators
- **IMPROVE** the ability to assess equipment risks, failure consequences and maintenance priorities
- **STRENGTHEN** on-the-job training and internal maintenance capability development
- **APPLY** practical ideas to reduce costs, extend equipment service life and improve performance

WHO SHOULD ATTEND?

- Maintenance Managers
- Maintenance Superintendents
- Reliability Engineers
- Maintenance Engineers
- Maintenance Planners
- Mechanical Engineers
- Electrical Engineers
- Technical Directors
- Maintenance and Repair Supervisors
- Risk and Reliability Specialists
- CMMS / EAM Specialists
- Professionals responsible for equipment performance, maintenance strategy and asset lifecycle management

LEARNING OBJECTIVES

- Define Equipment Reliability Management principles
- Understand the relationship between asset management and maintenance
- Develop key reliability indicators for equipment performance
- Identify equipment risks, failure probability and consequences
- Apply risk matrices for maintenance decision-making
- Select appropriate maintenance tactics across the asset lifecycle
- Define failure modes for specific systems and assets
- Apply RCM principles for reliability improvement
- Use diagnostics, forecasting and modelling for maintenance planning
- Develop a maintenance and repair strategy
- Improve equipment availability, reduce costs and extend service life
- And so much more



DAY 1

INDUSTRIAL ASSET MANAGEMENT AND MAINTENANCE

The relationship between asset management and maintenance
The concept, purpose and scope of maintenance
Industrial asset management and asset management system
Principles of asset management
Business processes in asset management
Roles and competencies in asset management
The place of reliability in asset management processes
Reliability management goals and objectives

RELIABILITY MANAGEMENT AND KEY INDICATORS

Key reliability indicators
Availability
Failure-free operation
Maintainability
Storability
Durability
Equipment reliability assessment and analysis
Equipment performance indicators
Equipment turnover and efficiency

EXERCISES

Defining reliability management goals and objectives
Identifying key reliability indicators for selected equipment
Mapping reliability indicators to asset management and maintenance processes

DAY 3

RELIABILITY-CENTRED MAINTENANCE — RCM

Definition of Reliability-Centred Maintenance
Selection of equipment for RCM analysis
Identification of system functions and functional failures
Definition of the ways in which the system fails — Failure Modes
Evaluation of the consequences of failure
Selection of appropriate maintenance tactics based on failure consequences
Implementation of selected tactics and their regular verification
Integration of RCM results into the maintenance and repair strategy

EXERCISES

Selecting equipment for RCM analysis
Defining failure modes for selected systems and assets
Evaluating failure consequences
Selecting and verifying maintenance tactics based on RCM logic

DAY 2

RISK MANAGEMENT IN EQUIPMENT RELIABILITY

Basic definitions of risk management
Risk identification and assessment
Probability and consequences of equipment failures
Risk matrix development and application
The impact of risks on the company's operational stability
Risk-based prioritisation of equipment and maintenance tasks
Integration of risk management into reliability and maintenance planning

MAINTENANCE AND REPAIR PLANNING

Implementation of reliability objectives through maintenance and repair planning
Maintenance tactics
Preventive maintenance
Corrective maintenance
Predictive maintenance
Condition-based maintenance
Optimising maintenance tasks across the lifecycle and enterprise
Reliability management across the lifecycle and enterprise

DAY 4

FORECASTING, MODELLING AND EQUIPMENT DIAGNOSTICS

Forecasting and modelling
Forecasting equipment degradation and failure probability
Reliability modelling for maintenance decision-making
Equipment fault diagnostics
Use of diagnostics, forecasting and modelling in reliability management

EQUIPMENT PERFORMANCE AND COST OPTIMISATION

Equipment performance indicators
Equipment turnover and efficiency
Equipment availability and operational performance
Cost reduction through reliability improvement
Increasing the service life of equipment
Lifecycle-based optimisation of maintenance and repair activities

MAINTENANCE AND REPAIR STRATEGY

Developing a maintenance and repair strategy
Reliability-driven maintenance strategy development
Optimisation of maintenance tasks across the enterprise
Implementation of selected maintenance tactics
Implementation of reliability improvement measures
Work completion and reporting
Monitoring, reporting and continuous improvement
Regular review of reliability performance and corrective actions



ASSET MANAGEMENT

Asset Management Excellence by John D. Campbell, Andrew K.S. Jardine, Joel McGlynn
ISO 55000: Asset Management — Overview, Principles and Terminology
Asset Management: Whole-Life Management of Physical Assets by Nicholas Anthony John Hastings

MAINTENANCE AND RELIABILITY

Maintenance & Reliability Best Practices by Ramesh Gulati
Maintenance Strategy by Anthony Kelly
Making Common Sense Common Practice by Ron Moore
Maintenance Planning and Scheduling Handbook by Doc Palmer
Reliability-Centered Maintenance by John Moubray

PERFORMANCE, COST AND LIFECYCLE MANAGEMENT

Life Cycle Costing for Engineers by B.S. Dhillon
Engineering Maintenance: A Modern Approach by B.S. Dhillon
Reliability Engineering by Elsayed A. Elsayed
Practical Reliability Engineering by Patrick D.T. O'Connor and Andre Kleyner

RCM, FAILURE ANALYSIS AND RISK

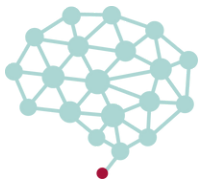
Reliability-Centered Maintenance by John Moubray
Root Cause Analysis Handbook by ABS Consulting
Failure Mode and Effects Analysis: FMEA from Theory to Execution by D.H. Stamatis

COMPREHENSIVE STUDY MATERIALS INCLUDED IN THE LEARNING KIT:

Equipment Reliability Management
Industrial Asset Management Principles
Maintenance and Repair Planning
Reliability Indicators and Performance Measurement
Risk-Based Maintenance Management
Risk Matrix Development and Application
Reliability-Centred Maintenance
Failure Modes and Failure Consequences
Equipment Fault Diagnostics
Forecasting and Modelling for Reliability
Maintenance Tactics and Strategy Development
Maintenance Cost Reduction
Equipment Service Life Extension
Work Completion and Reporting
Asset Management Roles and Competencies

IN-HOUSE TRAINING COURSES:

This type of training is the most cost-effective way to learn. Our global trainers design and customise courses based on your business needs and skill set. The tailored course is delivered at your facility which saves time as no travel is required.



BEST PRACTICES FOR MAINTENANCE AND RELIABILITY

**Business Innovation and
Training Ltd**

5 Brayford Square,
Stepney Green, London,
United Kingdom, E1 0SG

PLEASE COMPLETE THIS FORM AND SEND IT BACK TO:

E-mail: rinat.svetakov@biiresearch.com Phone: +44 20 4577 2790

DELEGATE DETAILS

1.Name: Mr/Mr s/Ms

Job Title:

Email:

2.Name: Mr/Mr s/Ms

Job Title:

Email:

3.Name: Mr/Mr s/Ms

Job Title:

Email :

COMPANY/ORGANISATION DETAIL

Name:

Person to Contact:

Email:

Address:

City:

Country:

Contact No:

Type of Business:

Website:

PAYMENT DETAILS

Method: CREDIT CARD ☐ WIRE TRANSFER ☐

3+ Delegates – 5 % Please note that all group discounts are given on the original course fee

5+ Delegates – 10 % Please note that all group discounts are given on the original course fee

Delegate Fee: Delegate ☐ USD per Delegate

TERMS& CONDITIONS:

1. Payment terms Business Innovation & Training Ltd (the Organiser) requires the full payment of the registration fee within 10 working days from the issue date of the invoice. The registration fee includes: conference documentation, admission to all conference sessions, luncheons and refreshments, admission to networking social breaks during the event. The registration fee does not include: travel, hotel accommodation, transfers, or insurance.

2. Cancellation by client

The client has the right to cancel his/her registration of the event. Cancellation must be received by the Organiser in writing to the designated email address started on the registration form (Designated Channel). The Organiser will refund full amount if delegate will cancel his/her registration 40 days or more prior to the course date. We regret that the full amount remains payable or non-refundable if delegate cancels his/her registration 39 days or less before the course date or if he/she fails to attend the course. Transfer of registration to another representative of the client is permissible 15 working days before the 1st day of the event by sending a written notice to the Organiser through the Designated Channel.

3. Cancellation by the Organiser

While every reasonable effort is made to adhere to the advertised program, circumstances can arise which may cause changes in the program, including but not limited to changes in the content, date(s), location or venue, or special features of the planned event. Such circumstances include but are not limited to acts of terrorism, war, extreme weather conditions, compliance with government requests, orders and legal requirements, failure of third party suppliers to timely deliver, and failure to register the minimum target amount of attendees for a given event. The Organiser reserves the right to change the content, date(s), location or venue and/ or special

features of an event, to merge the event with another event, or to postpone it or cancel it entirely as appropriate under the circumstances. Client agrees that the Organiser shall not be liable for any cost, loss or expense which may be incurred by client as a consequence of the event being so changed, merged, postponed or cancelled and client agrees to hold the Organiser harmless in any event.

4. Cancellation of the event

In case the Organiser cancels an event, then client can choose any of the below mentioned options:

A) Business Innovation & Training Ltd will refund full payment to the client within 15 working days.

B) Client can choose to receive a credit of the same amount received by the Organiser which will be valid for 1 year from the date of Organiser's notice of cancellation. Client can choose from a wide range of course programs offered by the Organiser and apply the credit to settle in full or in part the registration fees of the programs so choose. Unused credit after expiry will be forfeited.

5. Governing law

This contract shall be governed and constructed in accordance with the law of England and Wales. Any disputes arising under or in connection with this registration form shall be settled before the competent court in England. At its sole discretion, the Organiser may elect to bring any dispute arising under this contract to the jurisdiction of the courts in which the client's offices are located.

6. Other Conditions

Any terms or conditions contained in the client's acceptance which contradict or are different from the terms and conditions of this registration document shall not become part of the contract unless individually negotiated with the Organiser and expressly accepted by the Organiser in writing.