



# Healthcare Equipment Predictive Maintenance Course

25 – 29 April 2027  
Cape town

## Healthcare Equipment Predictive Maintenance Course

**Ref:** 252\_121882 **Date:** 25 – 29 April 2027 **Location:** Cape town **Fees:** 6000 Euro

### Overview

Healthcare Equipment Predictive Maintenance Course is a five-day foundation course for clinical engineering managers, biomedical equipment personnel, healthcare maintenance teams, facilities engineers, asset managers, reliability analysts, and healthcare technology coordinators, who leave with a Healthcare Equipment Predictive Maintenance Plan. Participants connect equipment inventories and criticality with maintenance history, condition data, failure modes, anomaly signals, work orders, spare-parts planning, service continuity, model limits, human validation, dashboards, and escalation. Agile Leaders Training Center provides training in healthcare equipment predictive maintenance.

### Who Should Attend

- Clinical engineering personnel responsible for equipment safety and availability
- Biomedical equipment personnel responsible for inspection and maintenance evidence
- Healthcare maintenance personnel responsible for work planning and completion
- Asset management personnel responsible for inventory, criticality, and lifecycle decisions
- Reliability personnel responsible for condition signals and failure analysis
- Healthcare technology personnel responsible for maintenance systems and reporting

The course assumes participants contribute to healthcare equipment, maintenance, reliability, assets, or technology management and leaves out clinical diagnosis, imaging interpretation, equipment repair instruction, facilities maintenance, cybersecurity, and technical model development.

### Departments and Industries

The course supports governed predictive maintenance across healthcare technology operations.

- Clinical engineering and biomedical equipment departments
- Healthcare technology management functions
- Maintenance, inspection, and reliability teams
- Asset management and procurement functions
- Hospitals, clinics, and diagnostic centers
- Medical device service and healthcare support organizations

### Learning Objectives

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



- Build an equipment inventory and criticality model
- Evaluate maintenance history and condition-data readiness
- Analyze failure modes, anomalies, and degradation signals
- Prioritize maintenance, work orders, parts, and continuity actions
- Apply model limits, human validation, dashboards, and escalation
- Build a Healthcare Equipment Predictive Maintenance Plan

## **Course Agenda**

### **Day 1: Equipment Inventory and Criticality**

- Healthcare Equipment Inventory Register
- Equipment Identification and Location Standard
- Clinical Service Criticality Matrix
- Safety and Availability Impact Screen
- Equipment Ownership and RACI Chart

### **Day 2: Maintenance and Condition Data**

- Maintenance History Quality Checklist
- Work-Order Data Completeness Review
- Inspection and Test Result Register
- Condition Indicator Definition Sheet
- Equipment Data Lineage Map

### **Day 3: Failure and Degradation Signals**

- Equipment Failure Mode Review Table
- Anomaly Signal Confidence Card
- Degradation Trend Analysis
- False Alert and Missed Signal Log
- Human Technical Validation Flow

### **Day 4: Maintenance Decisions and Controls**

- Maintenance Priority Decision Matrix
- Work-Order Evidence Pack
- Spare-Parts Readiness Plan
- Equipment Service Continuity Map
- Equipment Health Monitoring Dashboard



## Day 5: Predictive Maintenance Practice

- Suggested Exercise: Register and Prioritize Equipment
- Suggested Exercise: Validate Maintenance and Condition Data
- Suggested Exercise: Review Failure and Degradation Signals
- Suggested Exercise: Set Maintenance and Continuity Controls
- Capstone Exercise: Healthcare Equipment Predictive Maintenance Plan

## Practical Exercises

The course uses suggested activities that turn equipment and maintenance data into controlled, reviewable maintenance decisions.

- Suggested activity: build an inventory, identify equipment, score criticality, and assign ownership
- Suggested activity: assess maintenance history, work orders, inspections, condition indicators, and data lineage
- Suggested activity: review failure modes, anomalies, degradation, false alerts, and human validation
- Suggested activity: prioritize maintenance, assemble evidence, plan parts, map continuity, and design a dashboard

## FAQs

### Who suits healthcare equipment predictive maintenance training, and what does it assume?

Healthcare equipment predictive maintenance training suits personnel responsible for clinical engineering, biomedical equipment, maintenance, assets, reliability, or healthcare technology. It assumes familiarity with equipment records or maintenance work and requires no programming.

### How does healthcare equipment predictive maintenance differ from generic maintenance training?

Healthcare equipment predictive maintenance focuses on clinical criticality, patient and operator safety, inspections, equipment condition, healthcare service continuity, and accountable technical validation, while generic maintenance training addresses broader industrial assets and methods.

### How should teams validate a predictive maintenance signal?

Teams should verify equipment identity, data quality, operating context, maintenance history, condition trend, signal confidence, false-alert risk, manufacturer information, safety requirements, inspection evidence, and qualified technical judgment before authorizing work.



## **How should healthcare teams prioritize predictive maintenance work?**

Healthcare teams should compare safety impact, clinical service criticality, failure consequence, condition evidence, degradation rate, backup availability, parts lead time, work duration, and qualified staff availability before setting maintenance priority.

## **What belongs in a Healthcare Equipment Predictive Maintenance Plan?**

The plan should include inventory, criticality, data sources, maintenance history, condition indicators, failure modes, anomaly reviews, validation, work priorities, evidence, spare parts, continuity, dashboard measures, model limits, escalation, owners, and review cycles.

## **Conclusion**

Participants take back a Healthcare Equipment Predictive Maintenance Plan connecting inventory, criticality, condition data, failure signals, work orders, parts, continuity, controls, and escalation. It changes how teams prepare and validate equipment maintenance decisions. The plan provides a basis for traceable evidence, earlier degradation review, accountable authorization, and protected healthcare service availability.