

MAINTENANCE, RELIABILITY & ASSET MANAGEMENT TECHNOLOGY BEST PRACTICES

Inspection, Analysis & Monitoring

WHY CHOOSE THIS TRAINING COURSE?

Do you know about causes of machinery failures? Can you perform failure and reliability analysis? Are you able to take decisions based on data in your CMMS? Maintenance, Reliability and Asset Management Best Practices are critical for every successful individual and company. It is the job of the maintenance professional to optimise the maintenance effort using a structured and systematic approach.

This training course covers all the fundamentals of Maintenance, Reliability and Asset Management that a suitably qualified professional would be expected to carry out during his duty starting with the first steps and building up in a staircase fashion to a fully functional maintenance organisation. Individuals exposed to this training course will develop new insights into international best practices. They will learn why the best companies in the world and see Maintenance Management as the key to delivering the right quality product at the lowest costs. Technical knowledge is key to effective control and peer respect within any maintenance organisation; when this is achieved personal satisfaction follows. This seminar will give the delegate the required level of technical knowledge and skill to achieve that personal satisfaction.

This training course will feature:

- Fundamentals of maintenance, reliability and asset management
- Reliability modelling and failure modes for rotating and stationery machinery
- · Learning from major failures
- Condition based maintenance technologies
- Selection of appropriate maintenance strategies in asset management

HOW WILL THIS TRAINING COURSE BE **PRESENTED?**

This training course will utilise a variety of proven adult learning techniques to ensure maximum understanding, comprehension and retention of the information presented. This is designed to be a hands-on, stimulating experience. This training course is highly interactive with many discussions and facilitated practice sessions led by speakers who are at the forefront of their field. There

are plenty of case studies, and illustration of both worst and best practices in the field of maintenance and asset WHAT ARE THE GOALS?

To provide a step-by-step guide to maintenance, reliability and asset management best practice starting with foundations and building up to best practice that will deliver maximum business benefits. By virtue of dynamic participation in this seminar, it is to be expected that delegates will make a substantial, positive impact on the maintenance regime within their home organisation. At the end of this seminar participants will have:

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

- A solid understanding of Maintenance optimization best practice techniques
- An understanding of a range of equipment failures and their implications to the operational organisation.
- The ability to design a maintenance plan for the upkeep and maintenance inspections of static and rotating plant.
- A practical approach to developing an action plan to utilise these technologies in their own areas of responsibility, fitting them into the overall maintenance strategy, and measuring benefits
- Integration of Reliability Centred Maintenance (RCM), Total Productive Maintenance (TPM) and Condition Based Maintenance (CBM)

WHO IS THIS TRAINING COURSE FOR?

This comprehensive 3-day programme has been designed to benefit both qualified new professionals as well as experienced professionals who might need to refresh their skills It is highly recommended that all Maintenance, Reliability, Engineering and technical support staff including leadership and management attend this workshop. If you and your company are interested in greatly increasing productivity, this will be a very valuable course. This training course is suitable to a wide range of professionals but will greatly benefit:

- Maintenance supervisors and superintendents
- Reliability engineers
- Operational professionals who are interested in maintenance reliability and asset management
- Safety and integrity professionals
- Other professionals involved in process improvement

management.

THE COURSE CONTENT

Day One: Failure of Machines and Inspection Based Failure Analysis - Causes of Machinery Failure in Rotating Equipment

- · Cavitation in pumps.
- · Tripping of turbines.
- Surging in compressors.
- Wear Mechanisms : Fatigue, Fretting, and Corrosion.
- Fundamental Machine Problems: Balance Problems, Alignment Problems, Machinery Mounting Problems
- Fundamentals of maintenance and asset management.

: Failure Analysis and Reliability

- · Elementary Statistics and standards.
- · Reliability Models
- · Learning from major failures case studies in process industries.
- Learning from major failures case studies in oil and gas industries.
- Root cause analysis and extractions of specific and generic lessons.

Day Two: Statistical Failure Analysis and Reliability

- · Further reliability definitions and standards.
- · Hazard function and bath tub curve.
- · Weibull analysis.
- Case studies from rotating equipment.
- Case studies of major failures in other industries and lessons learned.

Condition Based Maintenance

- · General Purpose
- What is Vibration
- Thermal Monitoring
- · Lubricant Monitoring
- The Essentials of Vibration Monitoring

Day Three: Decision Analysis in Asset Management

- Main criticism of existing management of computerised maintenance systems.
- The Asset Management framework.
- The decision making grid approach.
- · Selection of appropriate maintenance strategies.
- · Integration of RCM, TPM, and CBM approaches



THE CERTIFICATE

Luthando Skills Certificate of Completion for delegates who attend and complete the training course

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DATE	VENUE	FEES
21-23 May 2025	Sandton	R 8,999
REGISTER NOW		

Complete & send by fax/mail to address given below. **PLEASE USE BLOCK CAPITALS.**

REGISTRATION DETAILS

FAMILY NAME:			
FIRST NAME:			
POSITION:	COMPANY:		
MAILING ADDRESS:			
TELEPHONE:	MOBILE:		
FAX:	EMAIL:		
AUSTHORISATION			
AUTHORISE BY:			
POSITION:	EMAIL:		
TELEPHONE:	FAX:		
POSTAL ADDRESS:			
MODE OF PAYMENT			
☐ Please invoice my companY			
☐ Please invoice me			

HOTEL ACCOMMODATION

Hotel accommodation is not included in the Registration Fee. A reduced corporate rate and a limited number of rooms are available for attendees wishing to stay at the hotel venue. Please make your request for accommodation at least 3 weeks prior to the commencement of the course.

EVENT DISCLAIMER

We reserve the right to cancel or postpone a seminar or related event, change venue, substitution of the Instructor and alter the course content at our sole discretion. If this occurs, our responsibility is limited to a refund of any registration fee(s) already paid. We are not responsible for airline tickets, hotels costs, other tickets or payments, or any similar fee penalties or related or unrelated losses, costs and/or expenses registrant may incur or have incurred as a result of any trip cancellations or changes.

CANCELLATION & SUBSTITUTION

You must notify the Registrar of cancellations at least 2 weeks before a scheduled seminar in order to be eligible for a credit. If you cannot attend, you may send a replacement from your organisation at no charge. There is a 50% handling charge for all cancellations or rescheduling. We reserve the right to cancel a seminar due to low enrollment. All registrants will be notified in advance and a full refund will be provided upon request.

4 WAYS TO REGISTER

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^{*}This fee is inclusive of Documentation, Lunch and Refreshments