

**Course Overview:**

This foundational course is tailored for professionals entering the maintenance and engineering field, focusing on the critical role of bearings and lubrication in machinery reliability. It equips participants with essential knowledge and hands-on insights into selecting, maintaining, and troubleshooting bearings and lubricants. Ensuring proper bearing function and effective lubrication practices directly impacts equipment efficiency, operational safety, and cost reduction in industrial settings.

**Course Objective:**

- Understand various types of bearings and their functions in machinery
- Learn the fundamentals and applications of industrial lubrication
- Apply best practices for installing and maintaining bearings
- Identify common bearing failures and implement preventive measures
- Develop effective troubleshooting skills for bearing and lubrication issues

**Course Outline:**

1. Introduction to Bearings
  - Types of bearings
  - Functions and applications
  - Bearing selection criteria
2. Basics of Lubrication
  - Principles of lubrication
  - Types of lubricants
  - Lubrication techniques
3. Bearing Installation and Maintenance
  - Installation techniques
  - Maintenance practices
  - Bearing inspection methods
4. Lubrication Systems and Maintenance
  - Types of lubrication systems
  - Routine lubrication tasks
  - Monitoring lubricant condition
5. Common Bearing Failures
  - Causes of bearing failures
  - Conducting failure analysis
  - Preventive strategies
6. Safety Considerations
  - Safety protocols in maintenance
  - Proper handling and disposal of lubricants
  - Environmental impacts and controls
7. Troubleshooting Bearings and Lubrication Issues
  - Systematic troubleshooting techniques
  - Problem identification and resolution
  - Real-world case studies
8. Emerging Trends in Bearings and Lubrication
  - Technological advancements in bearing design

**Training Language:**

English/Arabic

**Training Methodology:**

The course combines various teaching methods, including instructor-led presentations, group discussions, case study analyses, and assessments through quizzes and a final exam to engage participants and ensure they understand and retain the material.

**Venue | Date | Fees**

Riyadh | 27-07-2025 | 17,250 SAR

- Innovations in lubrication
- Future directions in maintenance practices

**Who Should Attend:**

- Maintenance Technicians
- Junior Engineers
- Technical Staff in Industrial and Manufacturing Sectors
- Professionals Interested in Machinery Maintenance