



Effective
Human
Intervention
LEADERS IN TRAINING

Maintenance Planning and Scheduling in the Era of Industry 4.0



This updated course provides participants with a strong foundation in traditional Maintenance Planning and Scheduling techniques while emphasizing the integration of Industry 4.0 tools and technologies, including Predictive Maintenance, IoT, Data Analytics, and Digital Roadmaps for implementation.

EHI HAS BEEN ACCREDITED BY MERSETA | ACCREDITATION No: 17-QA/ACC/0603/11 | B-BBEE LEVEL 2 CONTRIBUTOR

Effective Human Intervention (Pty) Ltd | 11 Hodgson Street, Vergesig, Durbanville, 7550, Western Cape | Tel: +27 21 979 5891 | Reg No: 2017/350228/07
Directors: Carel David Kruger | Deshun Bester | Justice Ngwenya | Contact: callie@ehiafrica.co.za | Website: www.ehiafrica.co.za

Copyright © 2017. Effective Human Intervention (Pty) Ltd. All Rights Reserved.

Maintenance Planning & Scheduling in the Era of Industry 4.0

Course Overview

This course on Maintenance Planning and Scheduling has been adapted to incorporate the principles and technologies of Industry 4.0. Participants will learn not only traditional planning and scheduling techniques but also how to leverage digital tools and data-driven strategies for more efficient and predictive maintenance.

Course Outcomes

By the end of this 3-day course, participants will be able to:

Day 1: Maintenance Fundamentals and Planning in Industry 4.0

- Understand the role of maintenance planning and scheduling in Industry 4.0.
- Develop effective maintenance strategies in the context of digitalization.
- Create preventive and predictive maintenance plans using Industry 4.0 technologies.
- Use data analytics for decision-making and performance measurement.

Day 2: Maintenance Scheduling and Optimization in the Digital Era

- Develop comprehensive maintenance schedules incorporating Industry 4.0 concepts.
- Implement predictive maintenance techniques and IoT sensors.
- Optimize spare parts inventory using digital tools.
- Apply cost-benefit analysis in a data-driven environment.

Day 3: Modern Tools and Technologies in Maintenance Planning and Scheduling

- Explore Industry 4.0 trends and technologies in predictive maintenance.
- Understand the role of CMMS and IIoT (Industrial Internet of Things) in planning and scheduling.
- Implement drone and robotics technology in maintenance operations.
- Develop a digital roadmap for Industry 4.0 adoption in maintenance.



Customised Virtual Training and/or In-house Training

If you wish to organize a Virtual Instructor Led Training session or In-House session for your organization, we will custom design a session that will help you achieve your desired learning goal. The main advantage of custom designed VILT, in addition to being significantly cost effective, is that they address topics specifically related to the needs of your organization. To discuss the possibility of designing and conducting such a session or In-House training session, contact us on 021 979 5891 or callie@ehiafrica.co.za for a comprehensive quotation.

About Your Course Facilitator

Mike Bosse is registered with various Sector Education and Training Authorities for subjects ranging from Engineering to Manufacturing as well as Learnership and Human Resource Management. His experience was gained in the Automobile Manufacturing Industry as well as the Steel Manufacturing and Elevator and Escalator Industries. For the past 15 years Mike has conducted courses for various large corporations across Southern Africa including Mozambique, Swaziland, Namibia, Democratic Republic of Congo.

Who Should Attend?

Delegates should represent a wide range of personnel in the organization who are involved in, or dependent on, effective maintenance planning, scheduling, and work control.

These would include:

- Maintenance Managers
- Maintenance Engineers
- Maintenance Supervisors
- Maintenance Planners
- Key Operations Supervisors
- CMMS Administrator or key users
- Key Maintenance support assistants

Benefits include

- Participation in an interactive workshop.
- Learn by interacting with other course attendees in similar problem situations.
- Supportive Workbook to exercise the techniques and skills demonstrated in the course.
- Certificate of completion on successfully completing all the required Workbook tasks

Registration

Registration will commence at 08:00 on the first day with the course beginning at 08:30 on each day. Refreshments will be provided at appropriate intervals, and lunch will be served at 12:30. The course will conclude at 16:30 on each day.

**All timings are approximate due to the interactive nature of the course.*



COURSE OUTLINE

Day 1: Maintenance Fundamentals and Planning in Industry 4.0

Morning Session:

- Introduction to Maintenance Planning in the Digital Age
- Developing Effective Maintenance Strategies in Industry 4.0
- Creating Data-Driven Preventive and Predictive Maintenance Plans
- Leveraging Data Analytics for Maintenance Decision-Making

Afternoon Session:

- Introduction to Reliability Centered Maintenance (RCM) in Industry 4.0
- Key Performance Indicators (KPIs) in the Digital Maintenance Landscape
- Hands-on Workshop: Utilizing Industry 4.0 Tools for Planning

Day 2: Maintenance Scheduling and Optimization in the Digital Era

Morning Session:

- Introduction to Maintenance Scheduling in the Digital Age
- Integrating Predictive Maintenance Techniques and IoT Sensors
- Optimizing Spare Parts Inventory Using Digital Tools
- Applying Cost-Benefit Analysis in the Data-Driven Environment



Afternoon Session:

- Managing Maintenance Schedules with Industry 4.0 Concepts
- Case Studies: Successful Implementation of Predictive Maintenance
- Hands-on Workshop: Predictive Maintenance Implementation

Day 3: Modern Tools and Technologies in Maintenance Planning and Scheduling

Morning Session:

- Industry 4.0 Trends and Technologies in Predictive Maintenance
- The Role of CMMS and IoT in Planning and Scheduling
- Implementing Drone and Robotics Technology in Maintenance
- Case Studies: Leveraging Industry 4.0 for Maintenance Excellence

Afternoon Session:

- Developing a Digital Roadmap for Industry 4.0 Adoption in Maintenance
- Course Conclusion, Feedback, and Q&A