

Semester:	8				
Course Code:	ME5150				
Course Name:	Maintenance Management				
Credits Value:	2 (Notional hours: 100)				
Pre-requisites:	None				
Core/ Optional:	Optional				
Hourly Breakdown	Lectures (hours)	Tutorials (hours)	Practical classes (hours)	Assignments (hours)	Independent Learning & Assessment (hours)
	26	02		04	68

Course Aim: To provide an opportunity for the students to have an in-depth knowledge on the modern practices in maintenance management.

Intended Learning Outcomes:

On successful completion of the course, the students should be able to;

- **identify** components and systems which are likely to fail
- **recognize** the signs and symptoms of possible failures
- **develop** strategies to prevent them
- **formulate** and implement effective measures to ensure maximum availability with minimum costs

Course Content:

- **Components of a maintenance management system:** Benchmarking; availability & reliability
- **Breakdown maintenance:** Failure types and distribution; planned maintenance; condition monitoring; non-destructive techniques
- **Preventive maintenance:** Improvement maintenance; design-out maintenance
- **Data gathering & handling:** Purchasing and inventory control; monitoring and control of maintenance;
- **Worker productivity:** Disposal, rejuvenation & replacement; adapting material resource planning and enterprise resource planning (MRP/ERP); technical reporting; computerization;
- **Overall Equipment Effectiveness:** Achieving effective maintenance management

Teaching/ Learning Methods:

Classroom lectures, tutorials, in-class exercises and assignments

Assessment Strategy:				
Continuous Assessment 40%		Final Assessment 60%		
Details:		Theory (%)	Practical (%)	Other (%) (Project)
Assignments/Quizzes	20%	60%		
Mid Semester Examination	20%			
Recommended Reading:				
<ul style="list-style-type: none"> ➤ Ben-Daya M., Duffuaa S.O., Raouf A., Knezevic J., Ait-Kadi D. (2009), <i>Handbook of Maintenance Management and Engineering</i> (1st Edition), Springer, London, United Kingdom. Free e-book available at: ➤ https://www.academia.edu/8538075/Handbook_of_Maintenance_Management_and_Engineering 				