

<b>1</b>	Course title	<b>Maintenance Methods and Techniques</b>
<b>2</b>	Course number	<b>0906755</b>
<b>3</b>	Credit hours (theory, practical)	<b>3 credit hours</b>
	Contact hours (theory, practical)	(3 theory, 0 practical)
<b>4</b>	Prerequisites/corequisites	-
<b>5</b>	Program title	Maintenance Engineering and Quality management
<b>6</b>	Program code	-
<b>7</b>	Awarding institution	University of Jordan
<b>8</b>	Faculty	School of Engineering
<b>9</b>	Department	Industrial Engineering
<b>10</b>	Level of course	Master
<b>11</b>	Year of study and semester (s)	2024-2025
<b>12</b>	Final Qualification	Master
<b>13</b>	Other department (s) involved in teaching the course	none
<b>14</b>	Language of Instruction	English
<b>15</b>	Date of production/revision	28 Sept. 2024

#### **16. Course Coordinator:**

Name: Prof. Issam Jalham  
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Phone number: 22925  
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#### **17. Other instructors:**

*Office numbers, office hours, phone numbers, and email addresses should be listed*

#### **18. Course Description:**

The course focuses on teaching students on how to set up a company management policy in order to be able to participate in its definition as far as maintenance is concerned, formulate the maintenance policy within a company, formulate the maintenance goals, understand the different maintenance strategies and how to choose the right strategy, and to specify the requirements for the maintenance activities. Moreover, computerized maintenance management systems (CMMS) are discussed. Specifically, maintenance information systems for planning, work order, technical/economic analysis, and technical documentation are addressed. Also, the course will cover topics in maintenance economics and costing, LCC/LCP techniques/methods, Logistics support, material and store handling, and methods for spare parts calculation.

**19. Course aims and outcomes:****A- Aims:**

**To introduce the student to the main methods and techniques of maintenance**

**B- Intended Learning Outcomes (ILOs):** Upon successful completion of this course students will be able to ...

1. Know the most common types of maintenance
2. Characterize each type of maintenance
3. Know when to apply the suitable type of maintenance
4. Be introduced to the main tools of economics and costing

**20. Topic Outline and Schedule:**

Week	Topic
1-2	Introduction, Course policy, Objectives, Learning outcomes, Course content, Knowledge evaluation
3-4	Definition of Maintenance, Objectives, Motivation Significance
4-7	Types of maintenance (General)
8-9	Planned maintenance
10-11	Assignments
12-13	Unplanned maintenance
14-15	Assignments
16	Case studies

**21. Teaching Methods and Assignments:**

Face to Face

**22. Evaluation Methods and Course Requirements:**

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	Period (Week)	Platform
midterm exam or Assignment	30%	Covers all topics	In due course	
Course project	30%			
Final exam	40%			

**23. Course Policies:**

All of the following are according to the University regulations:

A- Attendance policies:

B- Absences from exams and handing in assignments on time:

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

E- Grading policy:

F- Available university services that support achievement in the course:

**24. Required equipment:**

none

**25. References:**

A. Required book(s), assigned reading and audio-visuals:

- Handbook of Maintenance Management and Engineering, editors : Mohamed Ben-Daya, Salih O. Duffuaa Abdul Raouf, Jezdimir Knezevic, Daoud Ait-Kadi, Springer, latest edition**

B. Recommended books, materials and media:

- Research papers in maintenance
- Research papers in quality in maintenance

**26. Additional information:**

none

Name of Course Coordinator: **Prof. Issam Jalham** Signature: Issam

Date: 28 June 2020

Head of Curriculum Committee/Department: **Prof. Issam Jalham** Signature: Issam

Head of Department: Signature: -----

Head of Curriculum Committee/Faculty: ----- Signature: -----

Copy to:Head of Department  
Assistant Dean for Quality Assurance  
Course File