



Jordan University of Science and Technology
Faculty of Engineering
Civil Engineering Department

CE745 Pavement Management Systems - JNQF Level: 6

Second Semester 2023-2024

Course Catalog

3 Credit Hours. Concepts and benefits of Pavement Management Systems (PMS); pavement network definition; pavement evaluation procedures; distresses in flexible and rigid pavements; pavement condition survey; maintenance and rehabilitation methods; network and project level management; field visits; computer applications.

Teaching Method: On Campus

Text Book

Title	Pavement Management for Airports Roads and Parking Lots
Author(s)	M. Y. Shahin
Edition	2nd Edition
Short Name	Pavement Management System
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Pavement Maintenance	Asphalt in Pavement Maintenance, Manual Series No. 10 (MS-16)	American Asphalt Institute	1st Edition	

Instructor

Name	Prof. Turki Obaidat
Office Location	-
Office Hours	
Email	turk957@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Mon, Wed : 10:00 - 11:30

Room: قاعة ندوات /مدني

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Concept and components of pavement management system for roads, parking lots, and airports	
Week 2	Pavement evaluation procedures	
Week 3	Pavement network definition	
Week 4	Distresses in flexible pavements of roads	
Week 5	Distresses in Rigid pavements of roads	
Week 6	Distresses in unsurfaced roads	
Week 7	Pavement condition survey and rating procedure for roads	
Week 8	Mid-term Exam and exam evaluation	
Week 9	Distresses in flexible pavements of airfields	
Week 10	Distresses in rigid pavements of airfields	
Week 11	Pavement condition survey and rating procedure for airfields	
Week 12	Field survey for the term project	
Week 13	Pavement condition prediction models and maintenance and rehabilitation techniques	
Week 14	Network level management	
Week 15	Project level management	
Week 16	Discussion of the term project and final exam	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
An ability to recognize the concept, components, objectives, and benefits of pavement management system (PMS). [1L6K1]	10%	
An ability to identify the description, causes, quantities, and severity levels of pavement distresses in roads, parking lots, and airfields using the PAVER system. [1L6K2]	20%	

An ability to identify pavement network and conduct field condition survey in order to calculate the pavement condition index (PCI) and estimate the maintenance and rehabilitation requirements using Micro PAVER computer software. [1L6S2]	20%	
An ability to develop pavement condition prediction models using different techniques. [1L6C3]	10%	
An ability to apply the pavement management system (PMS) at the network and project levels using the Micro PAVER computer software. [1L6C4]	20%	
An ability to function and communicate effectively in a team in order to establish goals, plan tasks, and provide suitable solutions and recommendations. [1L6S2]	20%	

Relationship to Program Student Outcomes (Out of 100%)											
PI-1a	PI-2a	PI-2b	PI-2c	PI-2d	PI-3a	PI-4a	PI-4b	PI-5a	PI-6a	PI-6b	PI-7a

Relationship to NQF Outcomes (Out of 100%)				
L6K1	L6K2	L6S2	L6C3	L6C4
10	20	40	10	20

Date Printed: 2024-10-28