

Course Name:

Pavement Management

Course Number: 20-596	Credit: 3
Program: Graduate	Course Type: Technical Required
Prerequisite: -	Corequisite: -

Course Description (Objectives):

This course is designed to familiarize students with pavement management methods at both the network and project levels, focusing on providing strategies for selecting the most optimal policies for road maintenance.

Course Content (outline):

- Chapter 1: Introduction to Pavement Management and Maintenance Systems
- Chapter 2: Definition of Maintenance Management Systems at the Network Level
- Chapter 3: Introduction to Pavement Life-Cycle Cost Analysis Methods
- Chapter 4: Introduction to Different Types of Pavement Distress
- Chapter 5: Calculation of the Severity of Pavement Distress Types
- Chapter 6: Introduction to the PCI Method
- Chapter 7: Evaluation of Pavement Structural Capacity
- Chapter 8: Assessment of the Roughness Index
- Chapter 9: Assessment of Skid Resistance Index
- Chapter 10: Pavement Management System at the Network Level
- Chapter 11: Pavement Management System at the Project Level
- Chapter 12: Design of Various Overlays

References:

- Pavement Management for Airports, Roads, And Parking Lots, By: Mohamed Y. Shahin, 2005
- Modern Pavement Management, By: Ralph C. G. Haas, W. Ronald Hudson, John P. Zaniewsk, 1994 3.
- Little Book of Profiling, By: M.W. Sayers and S.M. Karmihas, 1998
- Pavement Analysis and Design, By: Y. Huang, 2004