

COURSE IDENTIFICATION FORM

Course Code and Name: IM5007 FLEXIBLE
ROAD PAVEMENTS

Department of : CIVIL ENGINEERING / MASTER
PROGRAMME

Semester	Theoretic Hour	Practice Hour	Total Hour	Credits	ECTS	Education Language	Type: Compulsory Elective
Atumn/Spring	3	0	3	3	5	Turkish	Optional
Prerequisite (s)							
Instructor		Assoc. Prof. Dr. Mustafa AKPOLAT				Mail : mustafaakpolat@munzur.edu.tr Web :	
Course Assistant						Mail : Web :	
Groups / Classes							
Course Aim		1. To teach soil components and classification. 2. To teach which improvement methods can be applied to problematic soils. 3. To give information about the properties and performance of pavement layers. 4. To teach pavement structural design methods. 5. Transferring knowledge about pavement management system together with maintenance and repair methods.					
Course Goals		Soil components and classification of soils. Reclamation of soils. Pavement layers. Various pavement layers. Pavement performance and design. Pavement design methods. Pavement management system. Reinforcement layers. Pavement deterioration, maintenance and repair.					
Course Learning Outs and Proficiencies		1. Understanding the reasons for the differences between soils. 2. To understand which methods can be applied for soil improvement. 3. To have developed the ability to comment on the properties of pavement layers and their behavior under traffic and environmental conditions. 4. To be able to create the most economical pavement combination according to traffic, environmental conditions and material properties. 5. To have theoretical and practical knowledge about when and how to intervene in road deterioration.					
Course Basic and Auxiliary Contexts		Highways Maintenance Manual Highways Project Design Guide Prof. Dr. Baha Vural KÖK - Flexible Pavements Lecture Notes					
Methods of Give a Lecture		Face to Face					

Assessment Criteria		If Available, to Sign (x)	General Average Percentage (%) Rate
	Midterm Exam	X	40
	1. Quiz		
	2. Quiz		
	3. Quiz		
	4. Quiz		
	Oral Examination		
	Practice Examination (Laboratory, Project etc.)		
	Final Exam	X	60
Semester Course Plan			
Week	Subjects		
1	Introduction and general information		
2	Soil components, classification of soils		
3	Compaction of soils, stabilization of soils, drainage of soils		
4	Subbase, foundation and pavement layers		
5	Blend and surface coating layers		
6	Coating performance and design principles		
7	Superstructure design method		
8	Superstructure design method		
9	MIDTERM EXAM		
10	New design methods		
11	Maintenance and repair of deterioration in pavement layers		
12	Superstructure management system		
13	Superstructure management system		
14	Preparation of staged construction and reinforcement projects		