

COURSE IDENTIFICATION FORM

Course Code and Name: IM5043 HIGHWAY
BRIDGE DESIGN

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. Erkan POLAT				Mail : erkanpolat@munzur.edu.tr Web :	
Course Assistant						Mail : Web :	
Groups / Classes							
Course Aim		The course aims to define the design vehicle loads used in the design of highway bridges and to design slab-type bridges, prestressed girder bridges, and steel girder bridges under these vehicle loads.					
Course Goals		<ul style="list-style-type: none">• Learn the bridge design vehicle loads defined in AASTHO LRFD.• Learn the design of single-span bridges.• Learn the design of multi-span bridges.• Learn the design of prestressed girder bridges.• Learn the design of steel girder bridges.					
Course Learning Outs and Proficiencies		<ul style="list-style-type: none">• Students will learn the mathematical modeling of highway bridges.• They will learn how to create and analyze the established model in software packages.• They will learn to evaluate the results of the solved model in terms of accuracy.					
Course Basic and Auxiliary Contexts		<ul style="list-style-type: none">• Course Notes• AASTHO LRFD Bridge Design Specification					
Methods of Give a Lecture		The course will be conducted in class.					

Assessment Criteria		If Available, to	General Average
---------------------	--	------------------	-----------------

		Sign (x)	Percentage (%) Rate
	Midterm Exam	X	50
	1. Quiz		
	2. Quiz		
	3. Quiz		
	4. Quiz		
	Oral Examination Practice Examination (Laboratory, Project etc.)		
	Final Exam	X	50
	Semester Course Plan		
Week	Subjects		
1	Definition of AASHTO Design Vehicle Loads		
2	Highway Bridge Slab – Concrete Deck Design		
3	Slab-Type Bridge Design		
4	Slab-Type Bridge Design		
5	Continuous Slab Bridge Design		
6	Continuous Slab Bridge Design		
7	Midterm Exam		
8	Prestressed Girder Bridge		
9	Prestressed Girder Bridge		
10	Design of Prestressed Girder Bridges		
11	Design of Prestressed Girder Bridges		
12	Design of Steel Girder Bridges		
13	Design of Steel Girder Bridges		
14	Final Exam		