

**University of Management and Technology**  
**School of Architecture & Planning**  
**Department of Architecture**

**Semester Spring 2021**

**Course Outline**

**Course code: CRP-137**

**Course title: Transportation Engineering**

Program	BS CRP	
Credit Hours	2+1	
Duration	16 weeks	
Prerequisites	None	
Resource Person	Nabeel Shakeel	
Counseling Timing	Monday, 9:00 AM Wednesday, 9:30 AM	Monday, 11:00 PM Wednesday, 12:30 PM
Contact	03134789645	Email: nabeel.shakeel@umt.edu.pk

**Chairman/Director signature.....**

**Dean's signature.....**

**Date.....**

## **Learning Objective:**

To Introduce Basic Concepts in Transportation Engineering

## **Learning Methodology:**

- Lecturing
- Written Assignments
- Guest Speaker
- Field surveys
- Report Writing
- Poster Display

## **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

### **Marks Evaluation**

### **Marks in percentage**

Quizzes	10%
Assignments	10%
Mid Term	30%
Term Project	20%
Final exam	30%
Total	100%

## **Recommended Text Books:**

Dusan Teodorovic. (2016), The Routledge handbook of transportation, Routledge.

Government of Punjab (2008), Punjab Traffic and Transport Manual, Volume-1, Signs, Signal and Pavement Markings.

Chakroborty, P. & Das, (2003), A Principles of Transportation Engineering, New Delhi, Prentice–Hall.

## **Reference Books:**

Khisty C. Jotin&Lall B. Kent, (2002), Transportation Engineering An Introduction, New Delhi, Prentice–Hall, (Third Edition).

Currin R. Thomas., (2001), an Introduction to Traffic Engineering: A Manual for Data Collection and Analysis

Jason, Y. C. (1982), Transportation Engineering: Introduction to Planning, Design and Operations, New York, Elsevier North Holland Inc. (Latest Edition).

## **Calendar of Course contents to be covered during semester**

**Course code: CRP-137**

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<b>Week</b>	<b>Course Contents</b>	<b>Reference Chapter(s)</b>
1	Introduction to transportation engineering	
2	Introduction to transportation systems	
3	Road-vehicle performance	
4	Road-vehicle performance	
	Introduction to fundamentals of traffic engineering and traffic management	

5		
6	Introduction to fundamentals of traffic engineering and traffic management	
7	Introduction to fundamentals of traffic engineering and traffic management	
8	Mid Exam	
9	Introduction to transportation engineering economics	
10	Vehicle and Human Characteristics	
11	Vehicle and Human Characteristics	
12	Traffic Flow Theory	
13	Traffic Flow Theory	

14	Intersection Capacity and Level-of-Service Analysis	
15	Intersection Capacity and Level-of-Service Analysis	
16	Final Exam	