

# **MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY**

FRM-001/00QSP-004

## **TENTATIVE TEACHING PLAN**

Dec.01.2001

Department: **Civil Engineering**Name of Teacher: **Dr. Shah Muhammad Kamran/Engr. Muhammad Saleem Raza**Subject: **Engineering Economics (CE423)** Batch: **20CE (A+B+C+D)** Year: **3<sup>rd</sup>** Semester: **1<sup>st</sup>**Semester Starting Date: **20-11-2023**Semester Suspension Date: **29-03-2024**

**Course Learning Outcomes (CLOs):** Upon successful completion of the course, the students will be able to:

CLO	Description	Taxonomy Level	PLO
1	UNDERSTAND fundamental principles and basic concept of engineering economy.	C2	1
2	APPLY the cost and value concepts to solve engineering problems.	C3	2

Sr. No.	Description of Topic	CLO	No. of Lecture(s)
01	<b>Introduction to Economics:</b> Micro and Macro Economics	1	1
02	Supply and demand theory, supply, and demand equilibrium	1	2
03	<b>Engineering Economics:</b> Principles of Engineering Economy	1	1
04	Engineering Economy Methodology	1	1
05	Steps in Engineering Economic Analysis	1	2
06	Cost and Value Concepts: Sunk and opportunity costs	1	1
07	Fixed, variable, and incremental costs	1	1
08	Recurring and nonrecurring costs, direct, indirect, & overhead costs	1	1
09	Standard costs, cash versus book costs, life cycle costs	1	1
10	Value, market value, use value, fair value, book value, salvage value	1	2
11	Sources of costing information: labor, material, overheads, fixed	1	1
12	variable cost, absorption costing marginal costing, standard costing	1	1
13	Inventory Valuation Methods	1	1
14	Comparing alternatives: Net present value, net present cost	2	3
15	Cost Benefit analysis, internal rate of return, payback period,	2	3
16	levelized costs, break-even analysis for capital investment	2	2
17	Margin of safety application in Master Production Scheduling.	2	2
18	<b>Depreciation:</b> Types & methods of computing depreciation	2	3
19	Economic life of equipment and replacement decisions	2	3
	<b>Total Hours</b>		<b>32</b>

Signature of Teacher:

Dated:10/12/2023

Remarks by DMRC: **APPROVED**

Signature of Chairman:

Dated: 21/12/2023