



MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY JAMSHORO

Department of Civil Engineering

LESSON PLAN

COURSE TITLE: Engineering Economics	COURSE CODE: CE423	CREDIT HOURS: 02	MINIMUM CONTACT HOURS: 32
COURSE INSTRUCTORS: Dr. Shah Muhammad Kamran/Engr. Muhammad Saleem Raza (A+B+C+D)			
Batch: 20CE	Semester: 7th	Semester Starting Date: 20-11-2023	Semester Suspension Date: 29-03-2024

COURSE LEARNING OUTCOMES:

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


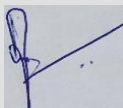

LESSON CONTENTS AND ASSOCIATED CLO(s)

Contents	CLO No.	Marks Assigned	Delivery Methods	Assessment Methods (Marks)
<ul style="list-style-type: none"> Introduction to Economics: Supply and demand theory, supply and demand equilibrium, micro-and macro-economic analysis Engineering Economics: Principles of engineering economy, engineering economy methodology, steps in an engineering economic analysis Cost and Value Concepts: Sunk and opportunity costs, fixed, variable and incremental costs, recurring and non-recurring costs, direct, indirect, and overhead costs, standard costs, cash versus book costs, life cycle costs, value, market value, use value, fair value, book value, salvage value, value addition. Product Costing: Sources of costing information: labor material, overheads, fixed cost, variable cost, absorption costing marginal costing standard costing. Inventory Valuation Methods. 	1	25	<ul style="list-style-type: none"> Class Lecture Discussion 	<ul style="list-style-type: none"> Class Test (05) Mid Semester Exam (10) Final Exam (10)
Total No. of lectures: 16				

<ul style="list-style-type: none"> • Comparing alternatives: Net present value, net present cost, Cost Benefit analysis, internal rate of return, payback period, levelized costs, break-even analysis applicable to capital investment. • Margin of safety application in Master Production Scheduling. • Depreciation: Types of depreciation, methods of computing depreciation. • Economic life of equipment and replacement decisions. <p>Total No. of lectures: 16</p>	2	25	<ul style="list-style-type: none"> • Class Lecture • Discussion 	<ul style="list-style-type: none"> • Assignment (05) • Final Exam (20)
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ASSESSMENT DETAILS

S. No.	Assessment Activities	Marks	Activities		CLO(s) to be assessed
1	Class Test/Assignment/Project Design/Presentation/Quiz/Field Report	10	Class Test	1	1
			Assignment	1	2
2	Mid Semester Exam	10	1		1
3	Final Semester Exam	30	1		1, 2

Prepared by: Engr. Muhammad Saleem Raza  Signature: Dated: 20-11-2023	Reviewed by: Curriculum Review Committee  Signature: Dated: 12-12-2023	Approved by: Chairman, CED  Signature: Dated: 12-12-2023
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