

AL IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY COLLEGE OF ENGINEERING Department of Civil Engineering

Course Information				
Course Code and Name:	GE 303 Engineering Economy			
Credit Hours:	3 (3 Lecture + 1 Tutorial)			
Prerequisites:	MATH 105 Calculus 1, MATH 106 Calculus 2			

Course Description

Time value of money formulas, application of time value of money formulas. Project selection using net present worth analysis using the common multiple and study period methods, one and two parameter sensitivity analysis. Bond cash flows and pricing, loan amortization and determining the remaining principle on a loan, project selection using annual equivalent worth, project selection using the incremental net present worth. Annual depreciation and book value using straight line, declining balance and MACRS methods. Annual cash flow and net present worth. Discounted benefit/cost ratio for a public project and determine if it meets the criterion. Inflation in estimating future cash flows, and defender/challenger replacement analysis using net present worth.

Textbook						
Title	Fundamentals of Engineering Economics					
Authors	C.S. Park					
Publisher	Pearson	Year and Edition	2013, 3 rd Edition			

Course Contents		
Introduction to Engineering Economy.		
Time Value of Money.		
Money Management.		
Equivalence Calculations under Inflation.		
Present Worth Analysis.		
Annual Equivalence Analysis.		
Rate of Return Analysis.		
Benefit-Cost ratio and Profitability Index Analysis.		

Academic Coordinator	Signature	(a) \(\frac{1}{2}\)
Dr. Rashid Khan		
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