

Jordan University of Science and Technology Faculty of Engineering Civil Engineering Department

CE303 Engineering Economy - JNQF Level: 7

First Semester 2024-2025

Course Catalog

2 Credit Hours. This course introduces the concepts of the time value of money, simple and compound interest, interest formulas, judging the attractiveness of proposed investments using different methods, inflation, depreciation calculations, increment cost, sunk cost, and cost of owning and operating equipment.

Teaching Method: Blended

Text Book					
Title	Engineering Economy				
Author(s)	Sullivan, William G.; Wicks, Elin M.; Koelling, C, and Patrick.				
Edition	16th Edition				
Short Name	Ref#1				
Other Information					

Instructor				
Name	Mrs. Nesreen Amari			
Office Location	-			
Office Hours	Sun: 12:30 - 14:00 Mon: 12:30 - 14:00 Tue: 10:30 - 12:30 Wed: 13:00 - 14:00			
Email	nkamari@just.edu.jo			

Class Schedule & Room

Section 1:

Lecture Time: Sun: 11:30 - 12:30

Room: C2009

Section 2:

Lecture Time: Tue: 08:30 - 09:30

Room: C3015

Prerequisites					
Line Number	Course Name	Prerequisite Type			
902010	MATH201 Intermediate Analysis	Prerequisite / Pass			
822010	HSS201MATH Intermediate Analysis	Prerequisite / Pass			

Tentative List of Topics Covered						
Weeks	Topic	References				
Week 1	Introduction.	From Ref #1				
Weeks 2, 3	Cost Concepts	From Ref #1				
Weeks 4, 5, 6, 7, 8, 9	Time Value of Money (Interest Formulas).	From Ref #1				
Weeks 10, 11, 12, 13	Evaluating a single project.	From Ref #1				
Week 14	Comparison and Selection among alternatives.	From Ref #1				

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
To be able to sketch cash flow diagrams for investments to evaluate their worth, and solve simple and compound interest and interest rates using various interest formulas. [1PI-2c] [1L7S1]	20%	
To be able to define the equivalence of money and uniform series using arithmetic and geometric gradients. [1PI-2c] [1L7K1]	20%	
To be able to locate the economic feasibility of engineering projects and investments. [1PI-2c] [1L7S1]	20%	
To be able to use principles of accounting and evaluate the depreciation charges using different methods. [1PI-2c] [1L7S1]	20%	
To be able to use break-even analysis to make decisions in production operations. [1PI-2c] [1L7S1]	20%	

	Relationship to Program Student Outcomes (Out of 100%)										
Pl-1a	Pl-2a	Pl-2b	Pl-2c	Pl-2d	Pl-3a	Pl-4a	Pl-4b	Pl-5a	Pl-6a	Pl-6b	Pl-7a
			100								

Relationship to NQF Outcomes (Out of 100%)				
L7K1	L7S1			
20	80			

Evaluation				
Assessment Tool	Weight			
First Exam	30%			
Second Exam	30%			
Final Exam	40%			

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