

**Faculty of Engineering & Technology**

**Engineering Economics and Finance**

**Information :**

**Course Code :** SCM 352

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

**Department :** Department of Structural Engineering & Construction Management

**Instructor Information :**

Title	Name	Office hours
Lecturer	HOSAM MOSTAFA MAHMOUD EID HEGAZY	2
Lecturer	HOSAM MOSTAFA MAHMOUD EID HEGAZY	2
Assistant Lecturer	Noura Khedr Abdul raheem Ahmed	2
Assistant Lecturer	Reham Milad Kamel Samaan	
Teaching Assistant	Mohamed Ahmed Reda Abas Ahmed	
Teaching Assistant	Mohamed Ahmed Reda Abas Ahmed	
Teaching Assistant	Sarah Salah Sayed Hussein Aly Elsheshtawy	
Teaching Assistant	Mohamed Yahia Mohamed Abdelkader	

**Area Of Study :**

Upon successful completion of this course, the student should be able to:

- Understand the basic concepts and main principles
- Calculate the values of the essential terms

Regarding engineering economy time value & interest rate capital recovery & arithmetic gradient factors equivalence techniques & cash flows nominal & effective rate of interest breakeven point analysis

**Description :**

Economic principles, Nominal and effective rate of interest, District and continues payments, Present value, Source and cost of capitals, Rate of return, Cost benefit ratio, Breakeven point, Replacement, Depreciation, Inflation, Principles of project evaluation, Risk management, Construction Economy, Housing economy, Transportation economy, Principle of finance.

**Course outcomes :**

**a.Knowledge and Understanding: :**

- 1 - Describe the main concept of time value & interest rate
- 2 - List the main items of equivalence techniques & cash flows

**b.Intellectual Skills: :**

- 1 - Solve problems regarding time value & interest rate
- 2 - Analyze the system of capital recovery & arithmetic gradient factors
- 3 - Solve problems regarding equivalence techniques & cash flows
- 4 - Calculate the values of nominal & effective rate of interest

**c. Professional and Practical Skills: :**

1 -	Prepare technical reports for engineering economy
2 -	Demonstrate presentation regarding equivalence techniques & cash flows

**d. General and Transferable Skills: :**

1 -	Manage time, and resources effectively
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**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
engineering economy	3	2	1
time value & interest rate	9	6	3
capital recovery & arithmetic gradient factors	9	6	3
equivalence techniques & cash flows	12	8	4
nominal & effective rate of interest	6	4	2
breakeven point analysis	3	2	1
Revision	3	2	1

**Teaching And Learning Methodologies :**

Interactive Lec.
Discussion
Problem Solving
Report / Present.

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00		
Mid- Exam I, II	30.00		
Quizzes / Assig.	15.00		
Report / Present.	15.00		