FUTURE UNIVERSITY IN EGYPT
جامعة المستقبل

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
Associate Professor	Dina Mahmoud Mohamed Elsayed Mansour	12
Associate Professor	Dina Mahmoud Mohamed Elsayed Mansour	12
Assistant Lecturer	Ahmed Salah Rashad Ahmed Abdelhakk	
Teaching Assistant	Mahmoud Mohamed Khalaf Ahmed	

Area Of Study :

1. Apply Construction Management Knowledge and Skills to Construction Projects
2. Work effectively with the Project Team
3. Prepare a Project Plan and Budget
4. Control Projects: Time/Cost/Quality
5. Identify, Assess and Monitor Project Risks

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 -	Students understand the principles of project management, the project phases and management life cycle.
2 -	Students can recognize management requirements: techniques and tools
b.Intellectual Skills: :	
1 -	Analyze the quantity take-off and quantity working-off
2 -	Knowing construction approaches such as planning, quality, safety etc.
3 -	Develop balanced and un-balanced bill
4 -	Develop tendering documents
c.Professional and Practical Skills: :	
1 -	Establish construction plans
2 -	Understand the management and execution of construction management.

3 -	Apply knowledge of mathematics, science and engineering
d.General and Transferable Skills: :	
1 -	Lead and motivate individuals.
2 -	Manage time and meet deadlines

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to Economic principles			
Introduction to Engineering Economy, Rational Decision Making, and The Four Fundamental Principles of Engineering Economics			
Factors: How Time and Interest Affect Money (PV, FV), Uniform Series Present Worth and Capital Recovery Factors, and Arithmetic Gradient Factors			
Fundamental concepts of engineering economy (Time value of money, Interest Rate and rate of return, Equivalence technique, Minimum Attractive Rate of Return, Types of Financing, and Cash Flows)			
Nominal and effective rate of interest			
Replacement and depreciation using breakeven point analysis			

Teaching And Learning Methodologies :

Assignment
Research
Midterm & Final Exam
Overall Percentage

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00		
Mid-term Exam 1	20.00		
Mid-term Exam 2	20.00		
Performance	10.00		
Quizzes	10.00		