

# Faculty of Engineering & Technology

# **Applied Topics In Construction Engineering**

#### Information:

Course Code: SCM 551 Level: Undergraduate Course Hours: 3.00- Hours

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

Instructor Information:				
Title	Name	Office hours		
Professor	Ibrahim Mahmoud Mahdi Mostafa	2		
Professor	Ibrahim Mahmoud Mahdi Mostafa	2		
Assistant Lecturer	Ahmed Salah Rashad Ahmed Abdelhakk			
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# Area Of Study:

At the end of this course, students will be able to:

- 1. Understand the basic requirements of quantity surveying
- 2. Understand the meaning of cost estimating, cost control and types of resources.
- 3. Understand the difference between balanced bid and unbalanced bid.
- 4. Understand the stages for tender preparation and project cost system.

# **Description:**

Using computer in project planning and cost estimate, Application on a real project and submitting a report at the end of the semester.

Course outcomes :				
a.Knowledge and Understanding: :				
1 -	a1- Students understand the principles of quantity surveying in			
2 -	a2 - Students can recognize management requirements: techniques and			
b.Intellectual Skills: :				
1 -	b1- Analyze the quantity take-off and quantity working-off			
2 -	b2- Understand the different techniques of estimating			
3 -	b3- Develop balanced and un-balanced bill			
4 -	b4- Develop tendering documents			
c.Professional and Practical Skills: :				
1 -	c1- Ability to handle different types of tendering			
2 -	c2- Ability to handle different types of quantity surveying			
3 -	c3- Apply knowledge of mathematics, science and engineering			



# d.General and Transferable Skills::

- 1 d1- Lead and motivate individuals
- 2 d2- Manage time and meet deadlines

Course Topic And Contents :				
Topic	No. of hour	s Lecture	Tutorial / Practical	
Introduction to Construction Estimating Process	4	2	2	
Types of Estimate	12	6	6	
Quantity surveying	12	6	6	
Cost Estimating and types of resources	4	2	2	
Balanced bid and unbalanced bid	8	4	4	
Develop project specification and bid item	8	4	4	
Stages for tender preparation and project cost system	8	4	4	

# **Teaching And Learning Methodologies:**

Lecture

Research

Class Work

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		

# **Course Notes:**

Student Lecture Notes