

**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 hours	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

#### **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		

#### **Course Notes :**

Student Lecture Notes
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