

## Faculty of Engineering & Technology

### Construction Technology

#### Information :

**Course Code :** SCM 553

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

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

#### Instructor Information :

Title	Name	Office hours
Lecturer	Youssef Ahmed Elsayed Kamaleldin Ahmed Awad	1
Lecturer	Youssef Ahmed Elsayed Kamaleldin Ahmed Awad	1
Assistant Lecturer	MOHAMMED TAHER ABDELHAMID MOHAMMED YOUSSEF	
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	

#### Area Of Study :

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

1. Understand the basic requirements of construction methods and techniques.
2. Understand the meaning of construction methods and requirements.
3. Understand the different types of construction methods and techniques.

#### Description :

Introduction to construction methods, Earth work, Foundation technology, Temporary structural, Precast concrete, Prestressed concrete, Steel structure fabrication and erection, Scaffolding: materials, connections, principles of design and erection, economy, Safety equipment: types,

#### Course outcomes :

##### a.Knowledge and Understanding: :

- 1 - a1 Students understand the principles of construction methods and techniques.
- 2 - a2 Students can recognize construction requirements: methods, techniques and

##### b.Intellectual Skills: :

- 1 - b1- Analyze the methods of construction and their performance
- 2 - b2- Knowing the different types of construction methods and can evaluate
- 3 - b3- Develop proper approach for method selection
- 4 - b4- Develop evaluation method

##### c.Professional and Practical Skills: :

- 1 - c1- Establish methods for construction project cases
- 2 - c2- Understand the targets of construction method selection
- 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 Methods	3	2	1
Earth work,	6	4	2
Foundation technology,	3	2	1
Analytical Methods	6	4	2
Temporary structural,	3	2	1
Precast concrete,	3	2	1
Pre-stressed concrete,	3	2	1
Steel structure fabrication and erection,	3	2	1
Scaffolding: materials, connections, principles of design and erection, economy,	9	6	3
Safety equipment: types, Prerequisites	3	2	1

**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

**Recommended books :**

"Construction Methods and Management (8th Edition) Stephens W. Nunnally (Author) Pearson Prentice Hall.)

