

## Faculty of Engineering & Technology

### Reinforced Concrete 4

#### Information :

**Course Code :** SCM 511

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

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

#### Instructor Information :

Title	Name	Office hours
Professor	AHMED FAROUK MOHAMED HASSAN DEIFALLAH	4
Professor	AHMED FAROUK MOHAMED HASSAN DEIFALLAH	4
Assistant Lecturer	SARAH SALAH SAYED HUSSEIN ALI ELSHISHTAWY	6
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	18

#### 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 - Design and draw neat details - Apply Codes provisions Regarding crack limited section types of tanks elevated tanks rested tanks underground tanks

#### Description :

Design and reinforcement details: arches, vierendeel girders, trusses, deep beams and short cantilever, Wind and earthquake loads resistant structures, Design of reinforced concrete walls, Fundamentals of pre-stressed concrete.

#### Course outcomes :

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

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|-----|---|
| 1 - | Explain the principals of crack limited section |
| 2 - | List the main items of types of tanks           |

##### **b.Intellectual Skills: :**

- |     |   |
|-----|---|
| 1 - | Calculate the values of crack limited section |
| 2 - | Assess issues of types of tanks               |
| 3 - | Design the elements of elevated tanks         |
| 4 - | Design the elements of rested tanks           |
| 5 - | Design the elements of underground tanks      |

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

- |     |   |
|-----|---|
| 1 - | Prepare technical reports for types of tanks      |
| 2 - | Apply Code provisions regarding elevated tanks    |
| 3 - | Apply Code provisions regarding rested tanks      |
| 4 - | Apply Code provisions regarding underground tanks |

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

1 - Work under stress

#### **Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
crack limited section	4	2	2
types of tanks	4	2	2
elevated tanks	16	8	8
rested tanks	16	8	8
underground tanks	16	8	8
Revision	4	2	2

#### **Teaching And Learning Methodologies :**

Interactive Lec.  
Discussion  
Problem Solving  
Project  
Report / Present

#### **Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00		
Mid- Exam I, II	30.00		
Project	10.00		
Quizzes / Assig	10.00		
Report / Present	10.00		

#### **Course Notes :**

-Lecture Notes on Moodle

#### **Recommended books :**

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#### **Periodicals :**

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#### **Web Sites :**

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