

## 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 Deifalla	4		
Lecturer	Tarek Salah El Din Moustafa Ragheb	5		
Lecturer	Dina Mahmoud Mohamed Elsayed Mansour	2		
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	18		
Teaching Assistant	Sarah Salah Sayed Hussein Aly Elsheshtawy	6		
Teaching Assistant	Mohamed Fathy Salem Mohamed			
Teaching Assistant	Sarah Salah Sayed Hussein Aly Elsheshtawy	6		

### 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, vierendeal girders, trusses, deep beams and short cantilever, Wind and earthquake loads resistant structures, Design of reinforced concrete walls, Fundamentals of pre-stressed concrete.

Course ou	utcomes:
a.Knowled	lge and Understanding: :
1 -	Explain the principals of crack limited section
2 -	List the main items of types of tanks
b.Intellect	ual 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.Professi	onal 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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