

Faculty of Engineering & Technology

Reinforced Concrete 2

Information :

Course Code : SCM 412 **Level :** Undergraduate **Course Hours :** 3.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Professor	Ahmed Farouk Mohamed Hassan Deifalla	4
Assistant Lecturer	Dina Yehia Zakaria Ewais	19
Assistant Lecturer	DINA HESHAM MOHAMED HELMY	7

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 sections under eccentric loads short columns long columns large span concrete structures frames polygons & arches

Description :

Design and reinforcement details: solid slabs, ribbed slabs, paneled beams slab, flat slabs (beam less slabs), Stairs, Design of sections under axial loading.

Course outcomes :

a. Knowledge and Understanding: :

1 -	a1- List the main items of sections under eccentric load
2 -	a2- List the main items of large span concrete structures
3 -	a3- Describe the main concept of frames
4 -	a4- Describe the main concept of polygons & arches

b. Intellectual Skills: :

1 -	b1- Design the elements of sections under eccentric loads
2 -	b2- Design the elements of short columns
3 -	b3- Design the elements of long columns
4 -	b4- Analyze the system of frames
5 -	b5- Analyze the system of polygons & arches

c. Professional and Practical Skills: :

1 -	c1- Apply Code provisions regarding short columns
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2 -	c2- Apply Code provisions regarding long columns
3 -	c3- Prepare technical reports for large span concrete structures
4 -	c4- Draw neat details of frames
5 -	c5- Draw neat details of polygons & arches
d.General and Transferable Skills: :	
1 -	d1- Work under stress

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
sections under eccentric loads	10	6	4
short columns	10	6	4
long columns	10	6	4
large span concrete structures	10	6	4
frames	20	12	8
polygons & arches	10	6	4
Revision	5	3	2

Teaching And Learning Methodologies :

Interactive Lecture
Discussion
Problem Solving
Lab Experiments
Project
Report / Presentation

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 / Assignments	10.00		
Report / Presentation	10.00		