

Faculty of Engineering & Technology

Reinforced Concrete 5

Information :

Course Code : SCM 514

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Professor	Khaled Mohamed Mohamed Heiza	1
Associate Professor	Dina Muhammad Fathy Ors	16
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	

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 wind loads earthquake loads shear walls moment resisting frames pre-stressed determined beams

Description :

Cracking limits, Water tanks, Footings and pile caps, Masonry walls: reinforced and un-reinforced

Course outcomes :

a. Knowledge and Understanding: :

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|-----|---|
| 1 - | Define the main terms of earthquake loads |
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b. Intellectual Skills: :

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|-----|--|
| 1 - | Calculate the values of wind loads |
| 2 - | Calculate the values of earthquake loads |
| 3 - | Design the elements of shear walls |
| 4 - | Design the elements of moment resisting frames |
| 5 - | Design the elements of pre-stressed determined beams |

c. Professional and Practical Skills: :

- | | |
|-----|--|
| 1 - | Apply Code provisions regarding wind loads |
| 2 - | Prepare technical reports for earthquake loads |
| 3 - | Apply Code provisions regarding shear walls |
| 4 - | Draw neat details of moment resisting frames |
| 5 - | Draw neat details of pre-stressed determined beams |

d.General and Transferable Skills: :

1 - Work under stress

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Calculation of wind loads	8	6	2
Calculation of earthquake loads	8	6	2
Shear walls	8	6	2
Moment resisting frames	8	6	2
Pre-stressed determined beams	24	18	6

Teaching And Learning Methodologies :

Class Lectures

Tutorials

Project

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final exam	40.00		
First Mid Term Exam	15.00		
Project	10.00		
Quizzes / Assig.	10.00		
Report / Present.	10.00		
Second Mid Term Exam	15.00		

Course Notes :

Lecture Notes on Moodle

Recommended books :

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Periodicals :

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Web Sites :

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