

## Faculty of Engineering & Technology

### Reinforced Concrete 3

#### Information :

**Course Code :** SCM 416

**Level :** Undergraduate

**Course Hours :** 3.00- Hours

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

#### Instructor Information :

Title	Name	Office hours
Associate Professor	Dina Muhammad Fathy Ors	18
Associate Professor	Dina Muhammad Fathy Ors	18
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 slab types solid slabs ribbed slabs paneled beams flat slabs staircases

#### Description :

Design of sections under eccentric forces, Design and reinforcement details of concrete columns, Structural systems for large span concrete structures, Design and reinforcement details of frames, Bearings, Concrete footings, Working loads design method.

#### Course outcomes :

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

1 -	a1- List the main items of slab types
2 -	a2- Define the main terms of staircases

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

1 -	b1- Assess issues of slab types
2 -	b2- Design the elements of solid slabs
3 -	b3- Design the elements of ribbed slabs
4 -	b4- Analyze the system of paneled beams
5 -	b5- Design the elements of flat slabs
6 -	b6- Analyze the system of staircases

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

1 -	c1- Prepare technical reports for slab types
2 -	c2- Apply Code provisions regarding solid slabs

3 -	c3- Apply Code provisions regarding ribbed slabs
4 -	c4- Draw neat details of paneled beams
5 -	c5- Apply Code provisions regarding flat slabs
<b>d.General and Transferable Skills: :</b>	
1 -	d1- Work under stress

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

Topic	No. of hours	Lecture	Tutorial / Practical
slab types	5	3	2
solid slabs	20	12	8
ribbed slabs	20	12	8
paneled beams	5	3	2
flat slabs	15	9	6
staircases	5	3	2
Revision	5	3	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
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#### **Recommended books :**

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#### **Periodicals :**

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**Web Sites :**

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