

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
Lecturer	Dina Muhammad Fathy Ors	14
Assistant Lecturer	DINA HESHAM MOHAMED HELMY	13
Assistant Lecturer	Dina Yehia Zakaria Ewais	2

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

d.General and Transferable Skills: :

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

<u>Teaching And Learning Methodologies :</u>

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:

Periodicals:

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Web Sites :			
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