

## 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	18

**Area Of Study :**

- 1- Get familiar with the solid slab design
- 2- Understand the requirements and the design of the paneled beams.
- 3- Design flat slabs.
- 4- Establish and design different structural system for stairs

**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: :**

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|-----|----------------------------------------------|
| 1 - | Define basic concepts of structural modeling |
| 2 - | Understand the behavior of structures        |

**b. Intellectual Skills: :**

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|-----|-------------------------------------------------------|
| 1 - | Ability to analyze the engineering problems           |
| 2 - | to derive different solution for engineering problems |
| 3 - | Ability to assess the obtained results accuracy       |

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

- |     |                                                                              |
|-----|------------------------------------------------------------------------------|
| 1 - | Ability to handle different types of structures                              |
| 2 - | Ability to handle different structural systems                               |
| 3 - | Ability to translate structural design to structural detailing for execution |

**d. General and Transferable Skills: :**

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|-----|---------------------------------------------------|
| 1 - | Ability to practice team work and present results |
| 2 - | Manage time and meet deadlines                    |

**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
Design of solid slabs	6	3	2
Design of paneled beams slabs	6	3	2
Design of Ribbed slabs	6	3	2
Flat slabs	12	6	4
Stairs	6	3	2

**Teaching And Learning Methodologies :**

Class Lectures

Tutorials

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Final-term Examination	40.00		
Mid-Term Examinations	20.00		
Oral Examination	10.00		
Other types of assessment	5.00		
Practical Examination	5.00		
Semester Work	20.00		

**Course Notes :**

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**Recommended books :**

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**Periodicals :**

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**Web Sites :**

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