

Faculty of Engineering & Technology

Building Construction & Materials 2

Information :

Course Code : ARC 242

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Professor	Alaa Eldin Elsayed Faried Hassan	
Lecturer	Hala Ali Nabil Mohamed Ali	
Assistant Lecturer	Bothaina Samih Ismail Abou El Khier	1
Assistant Lecturer	ETHAR ESSAM MAHMOUD ALY ELSHINAWY	
Assistant Lecturer	ETHAR ESSAM MAHMOUD ALY ELSHINAWY	
Teaching Assistant	Ayman Shawki Hamed Ibrahim Shehab	1
Teaching Assistant	Mazen Nabil Abdellatif Shehata	
Teaching Assistant	Ahmed Mohamed Gamal Eldin Hassan Abdallah Ashmawy	

Area Of Study :

Upon successful completion of the course, the student should be able to:

- 1-Understand the nature of loads and load transfer mechanisms in different building systems.
- 2-Select proper structural systems depending on building types.
- 3-Develop the understanding of principles of construction as related to construction materials.
- 4-Differentiate between structural and non-structural building components.
- 5-Develop the understanding of the aim & principles of working drawings.
- 6-Properly design staircases along with pertinent details.
- 7-Properly design window and door openings along with pertinent details.

Description :

Introduction to working drawings, Axis, dimensions, finishing schedules, Staircases rules and design, wooden Windows and Doors with details and schedules, Expansion and movement joints, Retaining walls; concrete and masonry.

Course outcomes :

a.Knowledge and Understanding: :

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| 1 - | Understand concept of designing and constructing Architecture within different disciplines. |
| 2 - | Understand basic applied and engineering science. |

b.Intellectual Skills: :

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| 1 - | Drive different solution alternatives for the Architectural problems. |
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2 - Analyze the solution alternatives and choose the optimum one.

c. Professional and Practical Skills: :

1 - Conduct physical models of Architectural works.

d. General and Transferable Skills: :

1 - Share ideas and communicate with others.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Working Drawing introduction	8	4	4
External and Internal Dimensions	8	4	4
Staircases: Design rules and Details	12	6	6
Doors, Windows, Finishing and Details	12	6	6
Expansion and Settlement joints	4	2	2
Retaining walls	4	2	2
Research Projects and Presentations	4	2	2

Teaching And Learning Methodologies :

Class discussions.

Lectures.

Drawing exercises in the Design studios.

Research assignments and presentations.

Information collection from different sources.

Site visits and field trips.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments and Projects	50.00		
Attendance and Participation	10.00		
Final- term examination	20.00		
In Class Quizzes	20.00		

Course Notes :

No Course Notes.

Recommended books :

- 1-McKay's W. B. et al; Building Construction, Vol.:1.
- 2-Chudley, R. & Greeno, R.; Building Construction Handbook, 7th ed., Elsevier Ltd., 2008.
- 3-Ramsey, Sleeper; Architectural Graphic Standards.
- 4-Mitchell, George A.; Building Construction, Vol.:1.

Periodicals :

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Web Sites :

www.sweetscatscatalogue.com