

Faculty of Engineering & Technology

Architectural Design 4

Information :

Course Code : ARC 312

Level : Undergraduate

Course Hours : 4.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	Mohamed Eladly Adely Mohamed Eladly	1
Assistant Lecturer	MOHAMED MAHMOUD SAYED MAHMOUD SALEH	1

Area Of Study :

The main aims of this course are to:

1. Enhance student's awareness of creative design process within a set of moderate structural needs, limitations and offerings.
2. Train student to use structure system as a form generator.
3. Encourage student to spell out thoughts and ideas.

Description :

The main concern and focus of this course will be about the different methods of "Form Generation". The priority will be for using advanced structure systems as the main tool to generate advanced and sophisticated forms. The course concerns the development of the students' sense of structure to generate architectural concepts and forms. The course projects may be such as: Design Center, Club House, Religious Complex, Rest House, Bus/railway Station, Indoor Sports Hall, and other similar ones.

Course outcomes :

a. Knowledge and Understanding: :

1 -	Define the theoretical bases upon which moderate scale structures and recreational accommodation buildings are designed.
2 -	Explain the relations between design problem variables and inputs in the case of moderate scale structures and recreational accommodation buildings.
3 -	Define the principles of building technologies, including the application of structures, construction methods, and materials in relation to human needs related to moderate scale structures and recreational accommodation buildings.
4 -	Explain the environmental aspects that affect the project quality in the case of moderate scale structures and recreational accommodation buildings.

b. Intellectual Skills: :

1 -	Use analytical thinking methods to define complex design problems.
2 -	Use creative thinking methods to propose different matured and enhanced design alternatives.
3 -	Evaluate design alternatives professionally.

4 -	Deduce the detailed requirements and architectural project program in the case of recreational accommodation buildings, according to the user behavior, site limitations, availabilities and function needs.
5 -	Generate design concepts based on the structure system as a form generator.

c. Professional and Practical Skills: :

1 -	Express creative and innovative solutions of the design problem..
2 -	Design recreational accommodation buildings in light of integrating social, aesthetic and technical requirements
3 -	Use proper presentation techniques to represent his/her final design proposal.

d. General and Transferable Skills: :

1 -	Express his/her ideas by visual, graphic, written and verbal means
2 -	Search for relevant information.
3 -	Manage time and meet deadlines

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Data collection and data review	20	6	9
Data Analysis	20	6	9
Site analysis and Concept	20	9	15
Form and Composition	20	9	15
Follow up	20	0	18
Project finishing & final submission	20	0	24

Teaching And Learning Methodologies :

Lectures.
Research
Sketch Designs
Group Discussion

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments/Studio work	40.00		
Final exam	10.00		
In Class Quizzes	10.00		
Participation	10.00		

Course Notes :

No course notes are required.

Recommended books :

Ramsey, C.; Ray, J. & Hoke, Jr.
Architectural Graphic Standards/Tenth Edition, AIA. John Wiley & Sons Inc., 2000, NJ. USA
/AIA. John Wiley & Sons Inc.
Chiara, J.:
Time Saver Standards for Architectural Design, Most recent metric version
Francis D.K. Ching:
Architecture: Form, Space and Order.
Architectural Magazines and Projects

Periodicals :

- o Architecture
- o Architectural Record
- o Architectural Review
- o Architecture d'aujourd'hui

Web Sites :

- o www.architecturalrecord.com
- o www.greatbuildings.com