

Faculty of Engineering & Technology

Architectural Design 3

Information :

Course Code : ARC 311

Level : Undergraduate

Course Hours : 4.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Professor	Gamal Mohamed Attia Elkholy	1
Lecturer	Walid Ahmed Moustafa Anan	2
Lecturer	Dina Maarouf Ahmed Mohamed Dief Allah	2
Teaching Assistant	Mazen Nabil Abdellatif Shehata	
Teaching Assistant	Aacer Mostafa Abdo Al Noshokaty	2
Teaching Assistant	Ahmed Khaled Selim Mohamed Faggal	
Teaching Assistant	Kamal Abdeleziz Ali Selim	

Area Of Study :

1. Develop design process awareness (including data gathering and analysis)
2. Share ideas and work in a team or a group.
3. Develop drawing and representation techniques.
4. Develop awareness of circulation systems, structures, lighting and form as applied to small scale buildings.
5. Organize and articulate form and space that satisfy both functional and aesthetic requirements.
6. Establish design and evaluation criteria.
7. Test different design alternatives.

Description :

Developing design skills and ability to deal with complex form generation processes and design assignments, Covering various levels of form generation, including: context, site, solids and voids manipulation, spaces, structure, architectural expression and character, Developing analytical and synthesizing abilities and communication skills, Emphasizing the importance of the setting: Environmental and socio-cultural factors in the design process, introduction and experimentation with current trends and conceptions through studio and design assignment, Multi-elements and limited scale projects. Projects addressing different building types vary from one course to the other.

Course outcomes :

a. Knowledge and Understanding :

1 -	Demonstrate knowledge and understanding of scientific background (theories and history) of similar building types.
2 -	Define design problems and illustrate in drawings and sketches possible solutions.
3 -	Define the principles of building technologies, including the application of structures, construction methods, materials and environmental design in relation to human needs.

b. Intellectual Skills :

1 -	Analyze and solve design problems using models, drawings and diagrams.
2 -	Conceptualize, investigate and develop the design of three dimensional objects and spaces.
3 -	Create architectural designs that integrate social, aesthetic and technical requirements.
4 -	Criticize and evaluate alternatives.
5 -	Decide and chose among different design alternatives.

c. Professional and Practical Skills :

1 -	Identify data and requirements for designing a certain building type.
2 -	Use appropriate graphic and modeling techniques for representation.
3 -	Submit professional good looking complete drawings.

d. General and Transferable Skills :

1 -	Communicate effectively with other people using visual, graphic, written and verbal means.
2 -	Work in a self-directed manner.
3 -	Work coherently and successfully as a part of a team in projects, assignments.
4 -	Manage time and meet deadlines.
5 -	Analyze problems and use innovative thinking in their solution.
6 -	Use the Internet in searching for information about specific building types.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Project data collection, site visits and data review.	20	4	16
Research presentations.	8	2	6
Five Design Sketches.	20	-	20
Design Development and follow up.	32	8	24
Final drawings, finishing and representation of project.	40	-	40

Teaching And Learning Methodologies :

Lectures.
Design studios.
Research assignments.
Information collection from different sources.
Site Visits and field trips.
Class discussions, sessions and design critiques.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments.	50.00		
Attendance.	5.00		
Final Project.	20.00		
Final-term examination.	20.00		
Participation.	5.00		

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.
- Chiara, J. & Time Saver Standards for Architectural Design.
- Architectural Magazines and Projects.
- Architecture: Form – Space and Order. By Francis D.K. Ching.

Periodicals :

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

Web Sites :

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