

Faculty of Engineering & Technology

Architectural Design 1

Information :

Course Code : ARC 211

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Professor	SAMIR SADEK HOSNY	11
Assistant Lecturer	Sameh Ibrahim Abdul Samie Ahmed Emam	10
Assistant Lecturer	AMANY MEDHAT HUSSEIN KHALIL MOHAMED	

Area Of Study :

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

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 :

The design process and its various aspects, Functional relations and circulation patterns, Qualitative and quantitative study of architectural spaces, Relationships between spaces and required openings, the effect of openings upon facades, Human / environmental / functional relations, Simple structures for small scale buildings, Simple design problem solving. Projects addressing different building types vary from one course to the other.

Course outcomes :

a.Knowledge and Understanding: :

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

b.Intellectual Skills: :

1 -	Decide and chose among different design alternatives
2 -	Criticize and evaluate alternatives
3 -	Create architectural designs that integrate social, aesthetic and technical requirements
4 -	Conceptualize, investigate and develop the design of three dimensional objects and spaces

- 5 - Analyze and solve design problems using models, drawings and diagrams

c. Professional and Practical Skills: :

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

d. General and Transferable Skills: :

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

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Projects data collection, site visits and data review	15	5	10
Research presentations	6	2	4
Five Design Sketches	18	—	18
Design Development and follow up	24	8	16
Final drawings, finishing and representation of projects	21	—	21

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