

Faculty of Engineering & Technology

Architectural Design 2

Information :

Course Code : ARC 212

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Professor	Samir Sadek Hosny	7
Professor	Youssef Omar Mohamed Elrefaey	1
Assistant Lecturer	SOMAYA ALBADRY ALY AHMED	
Assistant Lecturer	MOHAMED MAHMOUD SAYED MAHMOUD SALEH	4
Teaching Assistant	Amany Medhat Hussien Khalil Mohamed	
Teaching Assistant	Dina Ahmed Abdelsalam El Gharib	
Teaching Assistant	Sameh Ibrahiem Abdul Samie Ahmed Emam	1
Teaching Assistant	Mohamed Maher Mohamed Abd El Monem Ahmed	

Area Of Study :

- Upon successful completion of the course, the student should be able to:
1. Develop design process awareness (including data gathering & analysis).
 2. Share ideas and work in a team or a group.
 3. Develop drawing and representation techniques.
 4. Organize and articulate form and space that satisfy both functional and aesthetic requirements.
 5. Establish design and evaluation criteria.
 6. Test different design alternatives.
 7. Decide upon the most satisfying solution.

Description :

The main concern and focus of this course will be about the "Problem Solving" design process. The design process will be approached as a method of finding solutions for functional, environmental, and structural needs and problems. This will be as important as the need for generating creative and innovative ideas as the creative thinking methods should be well rooted in the prerequisite "Architecture Design (1)" course. The student will address various issues such as functional relations, 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, and similar issues. The course projects may be such as: a Celebrity Residence, Chalet, Youth Hostel, an Exploration Center, a Kindergarten, Kids' Arts Center, Children's Library/Museum and similar projects.

Course outcomes :

a. Knowledge and Understanding: :

1 -	a1. Defining the theoretical bases upon which a private residence is designed.
2 -	a2. Defining different site constrains.
3 -	a3. Explaining what is meant by design problem.

b. Intellectual Skills: :

1 -	b1. Applying analytical thinking methods to define design problems.
2 -	b2. Applying creative thinking methods to propose different design alternatives.
3 -	b3. Analyzing site constrains and limitations.
4 -	b4. Appraising spatial forms and their aesthetic values.

c. Professional and Practical Skills: :

1 -	c1. Designing architectural projects in light of spatial, aesthetic, and functional requirements.
2 -	c2. Applying creative concepts and methods to develop his/her design.
3 -	c3. Creating 2D & 3D sketches to express and develop his/her design.
4 -	c4. Using proper presentation techniques to represent his/her design proposal.

d. General and Transferable Skills: :

1 -	d1. Expressing his/her ideas by visual, graphic, written and verbal means
2 -	d2. Discussing and defending his/her ideas.
3 -	d3. Managing time and meet deadlines.
4 -	d4. Searching for relevant information.

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 (Projects & Researches)	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