

**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
Professor	Gamal Mohamed Attia Elkholy	3
Professor	Gamal Mohamed Attia Elkholy	3
Lecturer	Rana Mostafa Ahmed Hammam	
Assistant Lecturer	Nouran Ashraf Ali Abdeltawab	1
Assistant Lecturer	BASMA MOHAMED NAGIB IBRAHIM KHALIFA	
Assistant Lecturer	Aya Osama Ahmed Kamal Aly	
Assistant Lecturer	Nouran Ashraf Ali Abdeltawab	1

**Area Of Study :**

Upon successful completion of this course, the students will be able to:

“Develop design process awareness (including data gathering and analysis).

“Share ideas and work in a team or a group.

“Develop drawing and representation techniques.

“Develop awareness of circulation systems, structures, lighting and form as applied to small scale buildings.

“Organize and articulate form and space that satisfy both functional and aesthetic requirements.

“Establish design and evaluation criteria.

“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 - Understand concept of design Architectural Form and Context.

2 -	Understand concept of design Architectural Space and Context.
3 -	Understand Environmental and Human aspects in Architecture.
<b>b.Intellectual Skills: :</b>	
1 -	Analyze the solution alternatives and choose the optimum one.
<b>c.Professional and Practical Skills: :</b>	
1 -	Handle, process architectural laboratory devices ( manual & Computer Labs).
2 -	Conduct physical models of Architectural works.
<b>d.General and Transferable Skills: :</b>	
1 -	Work in teams (team work).
2 -	Share ideas and communicate with others.
3 -	Deal with others according to the rules of the professional ethics.

### **Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
Project data collection.	8	2	6
Site visits and data review.	8	2	6
Research presentations.	8	2	6
Design Sketch.	8	-	8
Design Development and follow up.	24	-	24
Design Sketch.	8	-	8
Design Development and follow up.	16	-	16
Final drawings.	8	-	8
Finishing and representation of project.	16	-	16
Final Project Submission.	8	-	8

### **Teaching And Learning Methodologies :**

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

### **Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Assignments (Projects & Researches)	50.00		
Attendance&Participation.	10.00		
Final Project.	20.00		
Final-term examination	20.00		

**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.

**Periodicals :**

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

**Web Sites :**

~www.architecturalrecord.com  
~www.greatbuildings.com