

## Faculty of Engineering & Technology

### Architectural Design 6

#### Information :

**Course Code :** ARC 412

**Level :** Undergraduate

**Course Hours :** 4.00- Hours

**Department :** Department of Architectural Engineering

#### Instructor Information :

Title	Name	Office hours
Lecturer	AMR MAMDOUH MAHMOUD MOHAMED ALI	1
Assistant Lecturer	Aya Osama Ahmed Kamal Aly	

#### Area Of Study :

Developing students preliminary design ideas into a full architectural project comprise major elements having wide structural spans. Provision for natural lighting and ventilation. including architectural drawings, audio-visual presentations and physical or computer generated models.

#### Description :

Visual relations of the group of buildings and their conformity with the general layout and context, the design should comprise major elements having wide structural spans, Provision for natural lighting and ventilation, Application of new technologies to enhance design conceptions.

#### Course outcomes :

##### **a.Knowledge and Understanding: :**

1 -	Demonstrate knowledge and understanding of concepts and theories of basic applied and engineering sciences appropriate to architectural engineering.
2 -	Demonstrate knowledge and understanding of the basics of information and communication technology (ICT).
3 -	Understand Environmental and Human aspects in Architecture.

##### **b.Intellectual Skills: :**

1 -	Analyze the solution alternatives and choose the optimum one.
2 -	Ability to derive different alternative solutions and reach architectural decisions considering balanced costs, benefits, technology applicability, safety, quality, reliability, site constraints, urban planning context and environmental impact.
3 -	Select and appraise appropriate ICT tools to a variety of architectural and engineering problems.

##### **c.Professional and Practical Skills: :**

1 -	Conduct research and collect data from different resources.
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##### **d.General and Transferable Skills: :**

1 -	Deal with others according to the rules of the professional ethics.
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### **Course Topic And Contents :**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial / Practical</b>
Projects data collection, site visits and data review.	24	6	18
Data Analysis.	16	4	12
pre-presentations of research work.	8	2	6
presentations of research work.	8	2	6
Development and follow up.	32	8	24
Final drawings, finishing and representation of projects.	24	6	18

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

Lectures.

Design studios.

Research assignments.

Information collection from different sources.

Class discussions, sessions and design critiques.

### **Course Assessment :**

<b>Methods of assessment</b>	<b>Relative weight %</b>	<b>Week No</b>	<b>Assess What</b>
1st Sketch.	5.00		
2nd Sketch.	10.00		
3rd Sketch.	15.00		
4th Sketch.	20.00		
Attendance.	10.00		
Final exam.	20.00		
Final project.	20.00		

### **Course Notes :**

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### **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.

### **Periodicals :**

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### **Web Sites :**

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