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 :

The main aims of this course are to:
a1. Enhance student's awareness of the futuristic visions of architecture and its various
impacts on the society.
a2. Enhance student's awareness of the state of the art technologies, materials, and systems.
a3. Train student to develop limitless visions

Description :

The main concern and focus of this course will be about the "Future of Architecture". Students
will be asked to think and imagine how the architecture works will be at the future. Concepts of
"Hyper Architecture", Designing in severe Environments", "Vertical Cities", "Biomimicry in
Architecture", "Responsive Architecture", and "Virtual Architecture" may be experienced. The
course projects may be such as: Virtual Museum, Floating City, Intelligent Responsive House,
and other similar ones.

Course outcomes :

a.Knowledge and Understanding: :

1 -	Identify principles of design of multi-functional architectural projects in accordance with relevant technical disciplines
2 -	Outline principles of preparation and presentation of complex design projects in a variety of contexts and scales
3 -	Identify different architectural functions and circulation patterns.
4 -	Identify appropriate forms and structure systems for different architectural functions.

b.Intellectual Skills: :

1 -	Breakdown multipurpose complex design projects into manageable inter-relatable partial components
2 -	Compare different design objectives and sort them in terms of priorities in the design process.
3 -	Analyze circulation patterns in accordance with architectural projects´elements.
4 -	Analyze site and environmental contexts and features.
5 -	Relate three-dimensional design with images of real sites and places

c.Professional and Practical Skills: :

1 -	Compose architectural design programs for multifunctional projects
2 -	Convert complex projects/programs into appropriate architectural forms using proper structure systems
3 -	Produce and present architectural design projects using an appropriate range of media and design-based software.
4 -	Review and criticize similar and existing projects.

d.General and Transferable Skills: :

1 -	Develop team work co-operative skills
2 -	Communicate effectively
3 -	Manage tasks and resources within constrained time

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Research work for the related topic. Introduction to project	17	4	13
Selecting and Discussing the topic per student	14	6	8
Alternative Schematic Designs	10	2	8
Developing Conceptual Design	15	2	13
Implementing and Developing Volumetric Studies	17	4	13
Implementing Spatial Organizations	19	4	15
Implementing Electronic Models	10	2	8
Developing in depth architectural parts of the project	12	4	8
Project Presentations	6	2	4

Teaching And Learning Methodologies :

Practical (Studio work)
Research

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments(research +sketch designs)	30.00		
Final exam	40.00		
Final project	20.00		
Performance & Participation	10.00		

Course Notes :

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Recommended books :

- (Data Books - Books of Architectural Theories - Selected references for famous buildings and Architects, Periodicals, Web sites, etc)
- Fawcett, A. Peter, (2003), Architecture: Design Notebook, Architectural Press, USA
- Adler, D., (1999), Metric Handbook: Planning and Design Data, Architectural Press, UK
- Pickard, Q., (2005), The Architects Handbook, Blackwell Publishing, UK

Periodicals :

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Web Sites :

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http://www.fue.edu.eg