

Faculty of Engineering & Technology

Graduation Project

Information :

Course Code : ARC 502

Level : Undergraduate

Course Hours : 5.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Professor	Hesham Mohamed Mohamed Abdelaal	
Lecturer	ETHAR ESSAM MAHMOUD ALY ELSHINAWY	
Lecturer	DINA MAHMOUD ABDELRAHID NOSEIR	1
Assistant Lecturer	Sameh Ibrahim Abdul Samie Ahmed Emam	3
Assistant Lecturer	BASMA MOHAMED NAGIB IBRAHIM KHALIFA	

Area Of Study :

The main aims of this course are to:

“Enhance student's awareness of the importance of fulfilling the urgent real needs of the country and to follow the strategic plans of the government.

“Train student to deal with real life situations and to manipulate conflicting requirements and needs in case of complex and mega scale projects.

Description :

The final design studio deals with a complex design problem to reflect the student's understanding and skills in handling and integrating all knowledge gained through the years of study. The goal is to achieve project's objectives on both architectural and urban levels as well as details.

Course outcomes :

a.Knowledge and Understanding: :

1 -	a1. Explain scientific background (theories and history) of similar building types.
2 -	a2. Define highly complicated design problems and illustrating in drawings and sketches the possible solutions.
3 -	a3. Define the principles of building technologies, including the application of structures, construction methods, materials and environmental design in relation to human needs.
4 -	a4. Identify data and requirements for designing complex mega projects which are similar to his/her own building type.

b.Intellectual Skills: :

1 -	Solve design problems using models, drawings and diagrams.
2 -	Conceptualize ideas in the form of three dimensional objects and spaces.
3 -	Criticize alternatives.

- 4 - Choose among different design alternatives.

c. Professional and Practical Skills :

- 1 - c1. Create architectural designs that integrate social, aesthetic and technical requirements.
- 2 - c2. Use appropriate graphic and modeling techniques for representation.
- 3 - c3. Submit professional good looking complete and integrated drawings.

d. General and Transferable Skills :

- 1 - d1. Communicate effectively with other people using visual, graphic, written and verbal means.
- 2 - d2. Work in a self-directed manner.
- 3 - d3. Work coherently and successfully as a part of a team in projects and assignments.
- 4 - d4. Manage time and meeting deadlines.
- 5 - d5. Analyze problems and use innovative thinking in their solution.
- 6 - d6. Use the Internet in searching for information about specific building types. 4- Course ILOs versus Program ILOs relation

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
First sketch design	40	-	40
Second sketch design	20	-	20
Third sketch design	30	-	30
Fourth & Final sketch design	30	-	30
Final Submission & Jury	30	-	30

Teaching And Learning Methodologies :

Lectures & presentations

Discussions of collected data

Students' suggested site visits

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
External Jury	25.00		
First Submission	5.00		—
Fourth Submission	15.00		
Internal Jury	10.00		
Internal Jury Head of Department: Prof. Dr. Samir Sadek Hosny	15.00		
Participation & Performance	10.00		
Second Submission	10.00		—
Third Submission:	10.00		—

Course Notes :

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Recommended books :

- a) Neufert, Architects Data.
- b) Time Saver Standards, Handbook.
- c) Architectural Magazines and Projects.
- d) Internet Resources that highlight design concepts of similar projects.

Periodicals :

- "Architecture
- "Architectural Record
- "Architectural Review
- "Architecture d'aujourd'hui

Web Sites :

- "www.architecturalrecord.com
- "www.greatbuildings.com