

## Faculty of Engineering & Technology

### Execution Designs 2

#### Information :

**Course Code :** ARC 472

**Level :** Undergraduate

**Course Hours :** 4.00- Hours

**Department :** Department of Architectural Engineering

#### Instructor Information :

Title	Name	Office hours
Professor	Gamal Mohamed Attia Elkholy	5

#### Area Of Study :

1. Demonstrate an entire set of working drawings presenting a complete set of documents for an architectural project with weight on structural, construction and technical working details.
2. Address areas like architectural details, materials and various finishing
3. Produce advanced technical mechanical and electrical documents for a chosen architectural project.
4. Address issues like landscape, architectural details, material knowledge and finishing.

#### Description :

Preparation of complete working drawings and design for a given (preliminary design) project, including plans, sections, elevations, details, openings, fenestrations, partitions and fixed furniture.

#### Course outcomes :

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

1 -	Understand the site analysis of an architectural project.
2 -	Recognize the role of different structures systems.
3 -	Understand a full and comprehensive knowledge of architectural drawings with regards to structure, electrical and mechanical work.
4 -	Recognize the characteristics of finishing materials.
5 -	Understand characteristics of finishing materials and structural elements in relation to the function of buildings.

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

1 -	Analyze solution problems related to building constructions.
2 -	Drive different solutions in solving architectural problems related to building constructions with emphasis on working details.
3 -	Identify alternative architectural and structural systems with reference to building constructions.

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

1 -	Apply high techniques in the production of working drawings.
2 -	Employ new and various finishing techniques.
3 -	Utilize new techniques used in materials and working details.

**d.General and Transferable Skills :**

1 -	Team work in research.
2 -	Share ideas and communicating with others.
3 -	Propose working drawings using different techniques.

**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to site analysis.	6	2	4
Preliminary stage: site drawings.	6	2	4
Preliminary stage: plans.	12	4	8
Preliminary stage: sections.	6	2	4
Research: finishing materials.	6	2	4
Preliminary stage: elevations.	6	2	4
Research: working details.	6	2	4
Preliminary stage: details.	6	2	4
Sanitary drawings.	6	2	4
HVAC drawings.	12	4	8
Full drawings of preliminary stage.	12	4	8

**Teaching And Learning Methodologies :**

Lectures.
Tutorials.
Information collection from different sources.

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Attendance & Participation.	10.00		
Final examination.	20.00		
Final Project.	20.00		
Mid-term examination(s).	30.00		
Quizzes.	20.00		

**Course Notes :**

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**Recommended books :**

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"Abd El Gawad, Tawfic, Building Material and Building Construction.  
"Mitchell, "Building Construction", B.T.Batsford Ltd London  
"Encyclopedia of Building Technology (Farouk Haider)  
"Encyclopedia of Building construction (Abd El Latif Elbakarie)  
"W.B. McKay, "Building Construction", Longmans.  
"All volumes of: "Architecture working details"

**Periodicals :**

Architecture: Form . Space and Order. By Francis D.K. Ching

**Web Sites :**

[www.ASCAAD.com](http://www.ASCAAD.com)