

## Faculty of Engineering & Technology

### Execution Designs 1

#### Information :

**Course Code :** ARC 471

**Level :** Undergraduate

**Course Hours :** 4.00- Hours

**Department :** Department of Architectural Engineering

#### Instructor Information :

Title	Name	Office hours
Lecturer	RANDA MEDHAT HUSSEIN KHALIL MOHAMED	2
Assistant Lecturer	AYA USAMAH AHMED KAMAL ALI	6
Teaching Assistant	Mariam Maged Kamal Eldeen Mohamed Gomaa	

#### Area Of Study :

"This course aims to provide students with the specialist creative practice for architectural engineering carrier in the field of Execution Design, problem solving, Analysis, Alternative selection and appropriate approaches to address sufficient information or data to construct any project.

"Principles of preparing a complete portfolio of working drawings.

"Application on a building or project. Principles of producing integrated and detailed working drawings.

"Analysis and applications of standards, material review and selection, execution detailing and documentation.

#### Description :

Preparation and specifications of building elements, Integrated drawings (plans, sections, elevations), Dimensioning and levels, Architectural and construction details, Fenestrations (doors and windows), Partitions, Fixed furniture, Finishing schedules, Proofing materials, Claddings (internal and external).

#### Course outcomes :

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

- 1 - Understand concept of designing and constructing Architecture within different disciplines.
- 2 - Understand basic applied and engineering science.

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

- 1 - Analyze solution problems related to integrated execution documents.
- 2 - Drive different solutions for preparation of working drawings of specific project.

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

- 1 - Conduct physical models of Architectural works.
- 2 - Apply some computer programs in the Architectural works.
- 3 - Conduct research and collect data from different sources (field work, archival records, internet etc)
- 4 - Apply high techniques in the production of integrated execution documents for a project.

##### **d. General and Transferable Skills: :**

- 1 - Share ideas and communicate with others.

2 -	Deal with others according to the rules of the professional ethics.
3 -	Manage time and meet deadlines.

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

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial / Practical</b>
Introduction to Preparation of integrated execution documents for projects.	6	2	4
Plan Drawing.	18	6	12
Elevation Drawing.	12	4	8
Section Drawing.	6	2	4
Layout Drawing.	6	2	4
Detail Drawing.	18	6	12
Sanitary Drawing.	6	2	4
Electrical Drawing.	6	2	4
Final revision for whole drawing.	6	2	4

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

Lectures.
Drawing exercises in the Design studios.
Research assignments and presentations.
Information collection from different sources.

### **Course Assessment :**

<b>Methods of assessment</b>	<b>Relative weight %</b>	<b>Week No</b>	<b>Assess What</b>
Assignments.	30.00		
Final Exam.	30.00		
Mid-Term Exam.	15.00		
Quizzes.	15.00		
Submitting final Project.	10.00		

### **Course Notes :**

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### **Recommended books :**

- 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)
- V.B. McKay, "Building Construction", Longmans.
- All volumes of: "Architecture working details"

**Periodicals :**

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**Web Sites :**

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