

## 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 HUSSIEN KHALIL MOHAMED	2
Lecturer	BOTHAINA SAMIH ISMAIL ABOELKHIER BADR	
Assistant Lecturer	BASMA MOHAMED NAGIB IBRAHIM KHALIFA	
Assistant Lecturer	AYA USAMAH AHMED KAMAL ALI	6
Teaching Assistant	Mariam Maged Kamal Eldeen Mohamed Gomaa	

### Area Of Study :

Upon successful completion of the course, the student should be able to: ÁDemonstrate 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. Áddress areas like materials and various finishing AProduce preliminary technical mechanical and electrical documents for a chosen architectural project.

#### **Description :**

The students will know about the basics of drafting working drawings. They will learn how to follow dimensioning and coding systems. In addition, they will learn how to use the different coding systems. They will also practice coordinating between architectural, structural, and electromechanical needs. Their practice will be on a small to moderate scale project.

#### Course outcomes :

### a.Knowledge and Understanding: :

1 -	a1. List some of the structural systems that are suitable to moderate and wide spans.				
2 -	a2. List the main complementary systems _structural and electromechanical systems_ that are integrated within the architectural design.				
3 -	a3. Define the annotating and dimensioning principals for construction drawings.				
4 -	a4. Explain the CSI coding system for construction sheets and digital files.				
b.Intellectu	b.Intellectual Skills: :				
1 -	b1. Modify the schematic design of moderate projects to suit the execution process.				
2 -	b2. Drive different solutions to coordinate between multidisciplinary systems.				
3 -	b3. Code construction drawings sheets according to the CSI coding system.				
c.Professional and Practical Skills: :					
1 -	c1. Prepare construction drawings.				

# 2 - c2. Apply annotation and dimensioning standards.



3 -	c3. Remark, graphically, complementary structural and electromechanical systems designs.				
4 -	c4. Coordinate between multidisciplinary designs.				
d.General a	d.General and Transferable Skills: :				
1 -	d1. Manage time to meet deadlines.				
2 -	d2. Share ideas via communicating with others.				
3 -	d3. Search for relevant information.				
4 -	d4. Work within constraints of time.				
5 -	d5. Refer to data sources.				
6 -	d6. Listen to other's thoughts.				

## **Course Topic And Contents :**

Торіс	No. of hours	Lecture	Tutorial / Practical
Fundamentals of working drawings of a pre-designed project	6	2	4
Preliminary stage: site drawings	6	2	4
Preliminary stage: plans	6	2	4
Preliminary stage: sections	6	2	4
Research: finishing materials	6	2	4
Preliminary stage: elevations	6	2	4
Mid Term Exam , Revision	6	2	4
Research: Coordination between multidisciplinary systems.	6	2	4
Sanitary drawings	6	2	4
Electrical drawings : Lighting & Sockets	6	2	4
Electrical drawings : Light Current; Fire Alarm, CCTV, Access control, õ Áetc.	6	2	4
HVAC drawings	6	2	4
Final project (Full drawings of preliminary stage)	12	8	12
Introduction to Preparation of execution drawings for projects	6	2	4

Teaching And Learning Methodologies :						
Lecture						
One to One Discussion	One to One Discussion					
Project based teaching						
Research						
Course Assessment :						
Methods of assessment	Relative weight %	Week No	Assess What			
Assignments/Lab work	20.00					
Final Examination	40.00					

Midterm 1

15.00



Midterm 2	15.00	
participation	10.00	

Course Notes :		
-Presentations -Lecture Notes		
Periodicals :		
Web Sites :		