



# Course Specification

## (Bachelor)

**Course Title:** vector based drawing

**Course Code:** APAR12

**Program:** Architectural Engineering Technology

**Department:** NOT AVAILABLE

**College:** Applied College

**Institution:** Umm Al-Qura University

**Version:** 1

**Last Revision Date:** Pick Revision Date.



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## A. General information about the course:

### 1. Course Identification

1. Credit hours: (3)

2. Course type

A. ☐ University ☐ College ☒ Department ☐ Track ☐ Others  
B. ☒ Required ☐ Elective

3. Level/year at which this course is offered: ( 1<sup>st</sup> year 2<sup>nd</sup> semester)

4. Course General Description:

This course is an introduction to the fundamentals of Computer Aided Design, beginning with simple drafting commands and standard drafting methods to produce technical and standard 2D drawings.

5. Pre-requirements for this course (if any):

6. Co-requisites for this course (if any):

7. Course Main Objective(s):

The course aims at the students to: Demonstrate an understanding of the knowledge required to use computer programs in designing the built environment. Effectively employ digital skills in different stages of designing the built environment. Utilize computer programs effectively in communication. Demonstrate responsibility for self-learning and continuing personal and professional development.

### 2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	10	100%
2	E-learning		
3	Hybrid <ul style="list-style-type: none"> <li>Traditional classroom</li> <li>E-learning</li> </ul>		
4	Distance learning		

### 3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	2x14
2.	Laboratory/Studio	2x14





3.	Field	
4.	Tutorial	
5.	Others (specify)	
Total		56

## B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Demonstrate an understanding of the knowledge required to use computer programs in designing the built environment.	K1	Lecture	Quizzes, sheets, exams, project
2.0	Skills			
2.1	Effectively employ digital skills in different stages of designing the built environment.	S1	Lecture	Quizzes, sheets, exams, project
2.2	Utilize computer programs effectively in communication.	S3	Lecture	Quizzes, sheets, exams, project
3.0	Values, autonomy, and responsibility			
3.1	Demonstrate responsibility for self-learning and continuing personal and professional development.	V2	Lecture	Quizzes, sheets, exams, project

## C. Course Content

No	List of Topics	Contact Hours
1.	Introduction and course objectives	4
2.	Using units and managing options	4
3.	Drawing commands - Part 1	4
4.	Drawing commands - Part 2	8
5.	Editing commands - Part 1	4
6.	Editing commands - Part 2	8
7.	Organizing the drawings using layers and inquiry commands	4
8.	Hatching, blocks and text techniques	8
9.	Creating and editing dimensions	8
10.	Printing drawings	4





Total

56

## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	sheets	Every section	20%
2.	Midterm exam	7th week	10%
3.	quizzes	3,5,9 (week)	10%
4.	project	10	30%
5.	Final exam	15	30%

\*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

## E. Learning Resources and Facilities

### 1. References and Learning Resources

Essential References	Bernold, L. (2015). Construction Equipment and Methods: Planning, Innovation, Safety. Wiley. Mehta, M. (2017). Building Construction: Principles, Materials, and Systems. Pearson. Levy, S. (2010). Construction databook. McGraw-Hill.
Supportive References	
Electronic Materials	Websites on the internet that are relevant to the topics of the course.
Other Learning Materials	Multimedia associated with the textbook and the relevant websites.

### 2. Required Facilities and equipment

Items	Resources
<b>facilities</b> (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	(Classrooms, laboratories, demonstration rooms/labs, etc.) Class room (studio)
<b>Technology equipment</b> (projector, smart board, software)	software Data show internet connection
<b>Other equipment</b> (depending on the nature of the specialty)	Computer Lab - Graphic Lab – Drawing Lab



## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Questioner of course quality
Effectiveness of Students assessment	Peer reviewers	Random grading report Test Completion report for test Standards
Quality of learning resources	Students	E-Survey of sufficiency of learning resources
The extent to which CLOs have been achieved	Program leaders	Results of quizzes, mid-term and final exams- Presentation and discussion.
Other		

**Assessors** (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify))

**Assessment Methods** (Direct, Indirect)

## G. Specification Approval

<b>COUNCIL /COMMITTEE</b>	Umm Al-Qura University Council
<b>REFERENCE NO.</b>	851141114462/190372
<b>DATE</b>	22/11/1446 هـ

