Course Specification
(Bachelor)

Course Title:	**Workshop Drawings**
Course Code:	**COE4306**
Program:	**Bachelor of Construction Engineering**
Department:	**Civil and Environmental Engineering Department**
College:	**College of Engineering and Computing in Al-Qunfudhah**
Institution:	**UMM Al-Qura University**
Version:	**4**
Last Revision Date:	**March 2025**

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A. General information about the course:

1. Course Identification

1. Credit hours: (...2.....)					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (...9/5.....)					
4. Course General Description:					
Structural drawings for construction projects, hand and with CAD drawing, the site plans, detailed drawings for Concrete elements (foundations, beams, columns, slabs,...). Detailed drawings for steel works (columns, beams,...), drawings of earth works. CAD applications (Autocad, Revit).					
5. Pre-requirements for this course (if any)**:**					
Reinforced Concrete Design **COE4203**					
6. Co-requisites for this course (if any)**:**					
Engineering Drawing **COE2101**					
7. Course Main Objective(s):					
By the completion of the course, the student should be able to: - Use efficiently a CAD program (Autocad, Revit,...) to draw structural drawings. - Recognize the main concepts of the civil drawing - Draw different RC elements - Draw steel works - Draw earth works - Make workshop drawings					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	100%
2	E-learning		
3	Hybrid • Traditional classroom		

No	Mode of Instruction	Contact Hours	Percentage
	• E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	
2.	**Laboratory/Studio**	60
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		60

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	Define the fundamental concepts of civil drawing.	K1	Interactive learning Self-directed learning	Assignments, quiz, Labs, Midterm and Final Exam
1.2	Describe the main techniques used in civil drawing.	K2	Interactive learning Self-directed learning	Assignments, quiz, Labs, Midterm and Final Exam
1.3	Explain complex problems related to civil drawing.	K1	Interactive learning Self-directed learning	Assignments, quiz, Labs, Midterm and Final Exam
...				
2.0	Skills			

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
2.1	Create detailed drawings of different reinforced concrete (RC) elements.	S1	Interactive learning Self-directed learning	Assignments, quiz, Labs, Midterm and Final Exam
2.2	Illustrate steel structural components in engineering drawings.	S1	Interactive learning Self-directed learning	Assignments, quiz, Labs, Midterm and Final Exam
2.3	Depict earthwork elements using appropriate drafting techniques.	S1	Interactive learning Self-directed learning	Assignments, quiz, Labs, Midterm and Final Exam
2.4	Utilize a CAD program to generate accurate drawings of RC elements and steel structures.	S2	Interactive learning Self-directed learning	Assignments, quiz, Labs, Midterm and Final Exam
2.5				
3.0	**Values, autonomy, and responsibility**			
3.1				
3.2				
...				

C. Course Content

No	List of Topics	Contact Hours
1.	Unit 01. Introduction to structural drawings	4
2.	Unit 02. The site plans	4
3.	Unit 03. Detailed drawings of foundations	4
4.	Unit 04. Detailed drawings of RC elements	12
5.	Midterm Exam	2
6.	Unit 05. Detailed drawings of steel works	10
7.	Unit 06. Workshop drawings	4
8.	Unit 07. Autocad Applications	20
Total		**60**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Assignments	Each week	10%
2.	Quiz	3,9,12	10%
3.	Mid term exam.	7	20%
4.	Lab exam.	15	20%
5.	Final exam.	16 or 17	40%

*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	Engineering drawing : PRINCIPLES AND APPLICATIONS Paperback – 1 February 2021
Supportive References	"Drawing for Civil Engineering", Jan A. van der Westhuizen, Juta Academic; Current Edition.
Electronic Materials	Electronic materials of the required reference and its PowerPoints slides
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Lecture rooms with a capacity of at least 20 students and fitted with multimedia projector and a computer.
Technology equipment (projector, smart board, software)	Data show, Smart Board
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Students' questioners running at the semester

Assessment Areas/Issues	Assessor	Assessment Methods
	Faculty members who teach this course	end. Analysis of students` Marks Regular feedback of the students about the course and the teaching methods
Effectiveness of Students assessment	Examination Committee	Direct: Peer review of examination papers and review or double check a minimum of three or 10% of answer papers.
Quality of learning resources	Faculty	Direct: Course Report
The extent to which CLOs have been achieved	Faculty	Direct and Indirect: Course report
Other		

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

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**Civil and Environmental Engineering Department Council in Al-Qunfudah**
REFERENCE NO.	**The fifteenth session of the academic year 1446**
DATE	**01/05/2025**