



Course Specification

(Bachelor)

Course Title: Construction Systems in architecture

Course Code: APAR26

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: (2)

2. Course type

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

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

4. Course General Description:

the course includes principal of building structure and types of slabs and construction methods, and it's uses in the field of building and architecture, the course concentrating on the construction systems and how can it be implemented and the types of wall construction like stones and masonry works. This course also teaching the types of foundations, isolation in buildings.

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

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

7. Course Main Objective(s):

This course aims to teach students the types of building construction system to be able to use them when dealing with construction project, the course aims also to educate types of methods of building walls and dealing with foundation and isolation in buildings.

2. Teaching mode (mark all that apply)

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

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	2x14





2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
Total		28

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	Identify Types of buildings structure	K1	Lectures presentation	- Short quiz - written exam
1.2	Identify Types of foundations in buildings.	K2	Lectures presentation	- Short quiz - written exam
1.3	Identify Types of isolations ways in buildings	K2	Lectures presentation	- Short quiz - written exam
2.0	Skills			
2.1	Apply knowledge of building structure and foundation types appropriate to the discipline.	S1	Lectures presentation	- Short quiz - written exam
2.2	implement and evaluate a type of structure and foundation appropriate to buildings types.	S2	Lectures presentation	- Short quiz - written exam
2.3	implement and evaluate a type of isolations appropriate to position in buildings.	S4	Lectures presentation	- Short quiz - written exam
3.0	Values, autonomy, and responsibility			
3.1	Work cooperatively in a small group environment.	V1	Lectures Presentation discussions	- Short quiz - written exam
3.2	Keep pace with advanced knowledge in the field of the electrical and sanitary drawings.	V2	Lectures Presentation discussions	- Short quiz - written exam

C. Course Content

No	List of Topics	Contact Hours
1.	introduction	2
2.	slabs constructions	2
3.	diverse types of reinforced concrete slabs	4
4.	advanced constructions	4





5.	methods of building domes, vaults	2
6.	Types of walls and Isolation in buildings	4
7.	Types of foundations	2
8.	Soil types and soil tests	2
9.	Shallow foundation	2
10	Deep foundation	4
Total		28

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quizzes	3,7	10%
2.	Midterm exam	8	10%
3.	Drawing sheets	weekly	20%
4.	Research report	14	10%
5.	Final term exam	16	50%

*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	Haider, Encyclopedia of modern technology in the construction of buildings, three parts, Alexandria: dar el marafa, 2010. K, Ching, building construction illustration, VMR. John Wiley& sons, inc 3rd, 2000.
Supportive References	
Electronic Materials	
Other Learning Materials	Barry F. K. and Gelnbind, S. J. "Surveying, Principles and Applications", 9 th Edition. Prentice Hall, 2014. Instructor Lecture book

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom for about 40 students, with white board, computer, projector and internet.
Technology equipment (projector, smart board, software)	A white board, Computer with multi-media, a printer, internet connection, data show, Microsoft Office, AUTOCAD





Items	Resources
Other equipment (depending on the nature of the specialty)	Printers and laptops for staff members are required.

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

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

