Course Specification
(Bachelor)

Course Title:	Special Topics in Transportation and Traffic Engineering
Course Code:	CE 4305
Program:	Bachelor of Science in Civil Engineering
Department:	Civil Engineering
College:	College of Engineering & Architecture
Institution:	Umm Al Qura University
Version:	*Course Specification Version Number*
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: Level 9th , 10th / Year 5th					
4. Course General Description:					
This course covers advanced selected topics in transportation and traffic engineering in accordance with the needs of the student and the guidance of the supervisor.					
5. Pre-requirements for this course (if any)**:**					
CE 2202 CE 4303					
6. Co-requisites for this course (if any)**:**					
7. Course Main Objective(s):					
To give the student the opportunity to attend one of the special transportation and traffic engineering topics that he might encounter during his studying. The topic should take into consideration the student's background, interests, and the requirements for his research project.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	45
2.	**Laboratory/Studio**	
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		45

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	It depends about the topic to be selected by the supervisor and it should follow the program Learning Outcomes Assessment Methods.	K1	• Lectures • Training tutorials	• Assignments • Quizzes • Written exams
2.0	**Skills**			
2.1	It depends about the topic to be selected by the supervisor and it should follow the program Learning Outcomes Assessment Methods.	S3	• Lectures • Training tutorials • Small group work	• Assignments • Quizzes • Written exams • Term project
3.0	**Values, autonomy, and responsibility**			
3.1	It depends about the topic to be selected by the supervisor and it should follow the program Learning Outcomes Assessment Methods.	V1	• Lectures • Training tutorials • Small group work	• Written exams • Term project

C. Course Content

No	List of Topics	Contact Hours
1	To be specified by the supervisor and depends about the topic.	45
	Total	45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Assignments	Weekly	5%
2.	Quizzes	4 & 6 & 8	15%
3.	Mid-Term	9	20%
4.	Term Project	14	10%
5.	Final Exam	16/17	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	• To be specified by the supervisor and depends about the topic.
Supportive References	• To be specified by the supervisor and depends about the topic.
Electronic Materials	• To be specified by the supervisor and depends about the topic.
Other Learning Materials	• To be specified by the supervisor and depends about the topic.

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	White board needs to be replaced with a bigger one with all writing and other accessories
Technology equipment (projector, smart board, software)	To be specified by the supervisor and depends about the topic.
Other equipment (depending on the nature of the specialty)	To be specified by the supervisor and depends about the topic.

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Students • Instructor • Program leader	• Indirect • Direct • Direct
Effectiveness of Students assessment	Independent member teaching staff	Direct
Quality of learning resources	• Students • Instructor	• Indirect • Indirect
The extent to which CLOs have been achieved	• Instructor • Student • Program leader	• Direct • Indirect • Direct
Other		

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

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**CIVIL ENGINEERING COUNCIL**
REFERENCE NO.	**THE FIFTEENTH SESSION OF THE ACADEMIC YEAR 1446**
DATE	**30 APRIL 2025**

Course Coordinator



Dr. Mohannad Alyamani