Course Specification

(Postgraduate Programs)

Course Title:	Seminars in Computer Engineering
Course Code:	CE6030
Program:	Master of Science in Computer Engineering
Department:	Computer and Network Engineering
College:	College of Computing
Institution:	Umm Al-Qura University
Version:	1.0
Last Revision Date:	12/4/2025

Table of Contents

A. General information about the course:

1. Course Identification:

1. Credit hours: (3)				
2. Course type				
A.	☐University	☐College	☒ Department	☐Track
B.	☒ Required		☐ Elective	
3. Level/year at which this course is offered: (Level 2)				
4. Course General Description:				
The seminar is a weekly meeting in which participants discuss recent and important results in the area of computer systems research. For a typical meeting, attendees will read and discuss one paper chosen from a recent systems, networking, or security conference. Papers are selected for discussion according to the semester's focus topic and the papers' relevance to participants' own research. Some meetings may be centered on presentations of a participant's own research: e.g., a practice talk for an upcoming conference. Also, guest speakers from academia and industry are invited to present their projects and research findings.				
5. Pre-requirements for this course (if any)**:**				
6. Co-requisites for this course (if any)**:**				
7. Course Main Objective(s):				
The course aims to increase participants' familiarity with recent and important research results in computer systems. Also, the course aims to improve participants' skills in reading and discussing computer systems research papers with critical mindset. The course also aims improves the skilles of presenting computer systems research.				

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	Identify challenges in recent computer systems' research papers	K1	Classroom lectures, talks by guest speakers, discussions, reading assignments at home, and flipped classes	1. Students are assigned to present research papers during class while other students are expected to engage in discussions. 2. Written reviews that requires students to read the research papers that are going to be presented during classes.
1.2	Explain concepts proposed in computer systems' research papers	K2		
2.0	**Skills**			
2.1	Discuss computer systems research papers with critical mindset	S3 and S2	Classroom lectures, talks by guest speakers, discussions, reading assignments at home, and flipped classes group is made to share instant information and feedback.	1. Students are assigned to present research papers during class while other students are expected to engage in discussions. 2. Written reviews that requires students to read the research papers that are going to be presented during classes.
2.2	Communicate effectively by presenting computer systems research papers	S3		

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
2.3	Reading and reviewing computer systems research papers effectively to identify key ideas, strengths, and weaknesses	S4		
3.0	**Values, autonomy, and responsibility**			
3.1	Demonstrate commitment to ethical and professional responsibilities in citing work of others and correctly delivering information	V1	Classroom lectures, talks by guest speakers, discussions, reading assignments at home, and flipped classes group is made to share instant information and feedback.	1. Students are assigned to present research papers during class while other students are expected to engage in discussions. 2. Written reviews that requires students to read the research papers that are going to be presented during classes.

C. Course Content:

No	List of Topics	Contact Hours
1.	Reading research papers and writing reviews to them	2
2.	How to present research papers of others	2
3.	Critical thinking in academic contexts	2
4.	Sample presentation of a research paper introduced by the course instructor and discussing sample of reviews of the paper written by the instructor and the students	3
5.	Presentations of research papers by the students and discussing the reviews of the others students afterwards	
6.	Talks by guest speakers from academia and industry to present their projects and research findings	
Total		**45**

D. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Presentations of research papers		50
2.	Discussion after research papers' presentations		10
3.	Written reviews of research papers		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	Research papers
Supportive References	How to Read a Paper by Srinivasan Keshav, ACM SIGCOMM Computer Communication Review 37, 3 (2007), 83–84. "Link for the latest version published online in February 17, 2016", http://svr-sk818-web.cl.cam.ac.uk/keshav/papers/07/paper-reading.pdf Writing Reviews for Systems Conferences by Timothy Roscoe, http://people.inf.ethz.ch/troscoe/pubs/review-writing.pdf Critical thinking in academic contexts, OISE Academic Skills Hub, https://www.oise.utoronto.ca/skillshub/resources/critical-thinking-academic-contexts
Electronic Materials	The instructor may provide as per requirements
Other Learning Materials	The instructor may provide as per requirements

2. Educational and Research Facilities and Equipment Required:

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (Projector, smart board, software)	Projector
Other equipment (Depending on the nature of the specialty)	The instructor may provide as per requirements

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students, Program Leaders	Indirect
Effectiveness of students' assessment	Program Leaders	Direct
Quality of learning resources	Students, Faculty	Indirect
The extent to which CLOs have been achieved	Students, Faculty, Program Leaders	Direct and Indirect
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

COUNCIL /COMMITTEE	**Computer and Network Engineering Department Council**
REFERENCE NO.	**The 18th Session Of The Academic Year 1446**
DATE	**15/4/2025**