Course Specification

(Postgraduate Programs)

Course Title:	Special Topics in Intelligent Systems
Course Code:	CE6037
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 3 or Level 4)				
4. Course General Description:				
This course will cover emerging new technologies in the area of intelligent systems. The topics of this course can change each offering acording to new topics that are not covered by either the core courses or the electives				
5. Pre-requirements for this course (if any)**:**				
The course offer variable course content and can change each offering. Therefore, the pre-requisites for this course may change accordingly.				
6. Co-requisites for this course (if any)**:**				
7. Course Main Objective(s):				
This course aims to increase participants' familiarity with recent and important topics in the area of intelligent systems. Also, the course aims to enrich participants' skills in emerging intelligent systems topics. The students will also have the opportunity to develop documentation and presentation skill in conveying the results of their work.				

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 the advanced principles and techniques of different areas in intelegent systems	K1	Lectures, discussions, and reading assignments and participation in solving examples	written exams, assignments, projects and oral presentations
1.2	Explain the selected advanced topics in sufficient depth in different aspects of intelegent systems	K2		
2.0	**Skills**			
2.1	Design and implement modern intelegent systems	S1	Lectures, project, discussions, tutorials	Written exams, assignments, projects and oral presentations
2.2	Solve problems in various areas of intelegent systems	S2		
2.3	Communicate effectively through a written report embodying the design, implementation, evaluation of intelegent systems	S3		
2.4	Evaluate the performance of intelegent systems	S4		
3.0	**Values, autonomy, and responsibility**			
3.1	Demonstrate commitment to ethical and professional responsibilities in intelegent systems	V1	Lectures, project, discussions, assignments and projects	Group assignments and projects
3.2	Work in a team to implement a project in intelegent systems	V2	Group assignments and projects	Group assignments and projects

C. Course Content:

No	List of Topics	Contact Hours
1.	New topics in intelegent systems area (assigned by the Curriculum Committee and approved by the Department Council)	45
Total		**45**

D. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Assignments and Quizzes		20
2.	Mid-term Exam		20
3.	Group Project		20
4.	Presentations of Resarch Papers		20
5.	Final Exam		20

*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 assigned by Curriculum Committee
Supportive References	To be assigned by Curriculum Committee
Electronic Materials	To be assigned by Curriculum Committee
Other Learning Materials	To be assigned by Curriculum Committee

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)	To be assigned by Curriculum Committee

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**