

Faculty of Computers and Information Technology

Selected Topics in Computer Science-1

Information :

Course Code : CS467

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Computer Science

Instructor Information :

Title	Name	Office hours
Associate Professor	Hanaa Bayoumy Ali Mubarrez	
Lecturer	HEBA MOHSEN MOHAMED MOSAAD HUSSIAN	
Assistant Lecturer	Hadeer Khalid Tawfik El Zayat	
Teaching Assistant	Salma Mohamed Shalaby Abdelaziz	

Area Of Study :

Use and adopt fundamental and advanced mathematics, basic sciences and computer science theories in all development phases of computer-based modern systems.
 Comprehend deeply the advanced concepts of computer science to be ready for further and continuous learning.
 Show a complete understanding of all modern computer science disciplines.
 Develop and evaluate a computer based system process and components.
 Compare, evaluate and select a design of computer-based modern systems from a set of alternatives

Description :

Topics which are not included in the curriculum and seems to be needed should be suggested as an elective course by CS department

Course outcomes :

a.Knowledge and Understanding: :

1 -	Explain the advanced principles and techniques of different areas in computer science
2 -	Discuss the advanced topics of the specialized courses in computer science
3 -	Explain the selected advanced topics in sufficient depth in different aspects of modern computer-based systems

b.Intellectual Skills: :

1 -	Compare and differentiate between algorithms, methods and techniques used in advanced computer science problems solutions
2 -	Classify data, results, methods, techniques and algorithms used to build modern computer-based systems
3 -	Identify main ideas, patterns, components, attributes and detect relationships between these components of modern computer-based systems

c.Professional and Practical Skills: :

1 -	Evaluate the quality of modern computing systems using different factors and different constraints
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| 2 - | Apply different soft skills by oral, written, presentations and visual means in a professional way during development modern computer-based systems |
| 3 - | Create technical reports according to professional standards to finalize modern computer-based systems |

d.General and Transferable Skills: :

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| 1 - | Work on a team for the development of a requirements document |
| 2 - | Apply communications skills in presentation and report writing of requirements engineering deliverables |

ABET Course outcomes :

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|-----|--|
| 1 - | Use and adopt fundamental and advanced mathematics, basic sciences and computer science theories in all development phases of computer-based modern systems. |
| 2 - | Comprehend deeply the advanced concepts of computer science to be ready for further and continuous learning. |
| 3 - | Show a complete understanding of all modern computer science disciplines. |
| 4 - | Develop and evaluate a computer based system process and components. |
| 5 - | Compare, evaluate and select a design of computer-based modern systems from a set of alternatives. |

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Determined by the department	32	16	16
Mid-Term Exam	2		
Determined by the department	16	8	8
Final Exam	2		

Teaching And Learning Methodologies :

Interactive Lectures including Discussions

Practical Lab Sessions

Self-Study (Project / Reading Materials / Online Material / Presentations)

Problem Solving

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00	14	
Individual Projects	10.00		
Midterm Exam (s)	20.00	9	
Others (Participations)	10.00		
Quizzes	10.00	5	
Team Work Projects	10.00		

Course Notes :

An Electronic form of the Course Notes and all the slides of the Lectures is available on the Students Learning Management System (Moodle)

Recommended books :

Depends on selected topic

Web Sites :

Depends on selected topic