

## **Faculty of Computers & Information Technology**

### **Selected Topics in Computer Science-2**

#### **Information:**

Course Code: CS468 Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Department of Computer Science

### **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

Course ou	tcomes :			
a.Knowled	ge 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.Intellectu	ial Skills: :			
1 -	Identify main ideas, patterns, components, attributes and detect relationships between these component of modern computer-based systems			
2 -	Classify data, results, methods, techniques and algorithms used to build modern computer-based systems			
3 -	Compare and differentiate between algorithms, methods and techniques used in advanced computer science problems solutions			
c.Profession	onal and Practical Skills: :			
1 -	Create technical reports according to professional standards to finalize modern computer-based systems			
2 -	Apply different soft skills by oral, written, presentations and visual means in a professional way during development modern computer-based systems			
3 -	Evaluate the quality of modern computing systems using different factors and different constrains			
d.General	and Transferable Skills: :			
1 -	Apply communications skills in presentation and report writing of requirements engineering deliverables			
2 -	Work on a team for the development of a requirements document			



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