

Faculty of Engineering & Technology

Introduction to Computer

Information :

Course Code : CSC 101

Level : Undergraduate

Course Hours : 2.00- Hours

Department : University Requirments

Area Of Study :

Upon completion of this course, students will be able to:

- Analyze the requirements to understand different components in computer system and operations of the computer systems.
- Demonstrate knowledge and understanding of the basic elements of computer hardware and software and their roles in a computer system.
- Combine and evaluate different tools and facilities.
- Use modern techniques to use Internet and WWW for searching and browsing information.
- Comprehend deeply the basic concepts of software development.
- Compare, evaluate and select methodologies to solve the algorithmic problems using pseudo code and flow chart.
- Comprehend the Computer Language and different number systems.

Description :

Introduction to computer hardware, computer software and computer networks. Data internal representation in computer memory. Numbering systems. Problem solving techniques using Pseudocode (Structured English).

Course outcomes :

a.Knowledge and Understanding: :

1 -	a1. Describe the basics of software development.
2 -	a2. Define the basics of application software.
3 -	a3. Identify basic computer terminology.
4 -	Understand different components in computer system and operations of the computer systems.

b.Intellectual Skills: :

1 -	Analyze and design a solution for computing problems considering limitations and constrains.
2 -	Solve the algorithmic problems using pseudo code and flow chart.

c.Professional and Practical Skills: :

1 -	c1. Run computing equipment in different physical environment.
2 -	c2. Install and maintain different supporting tools for construction and documentation software systems.
3 -	Realize information storage and retrieval skills in computing software systems.
4 -	Acquire a set of fundamental research skills from different resources.

d.General and Transferable Skills: :

1 -	Exploit a range of learning resources.
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2 - Apply communication skills in presentations and report writing using various methods and tools.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction To Computer and Information Technology & Computer Hardware Components	2	1	
Computer Hardware Components & The von Neumann Model	2	1	
Computer Hardware Components	2	1	
Computer Software	2	1	
Computer Networks, Internet and WWW	2	1	
Problem Solving Methodologies and Algorithmic Approach	2	1	
Problem Solving Methodologies and Algorithmic Approach	2	1	
Pseudo Code	2	1	
Pseudo Code	2	1	
Pseudo Code	2	1	
Numbering Systems	2	1	

Teaching And Learning Methodologies :

Interactive Lectures including discussion
Tutorials
Practical Lab Sessions
Self-Study (Project / Reading Materials / Online Material / Presentations)
Seminars
Case Studies
Problem Solving
Others (Specify)

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments	20.00		
Final Exam	40.00		
Midterm Exam (s)	30.00		
Others (Participation)	10.00		

Course Notes :

Course Notes are available with all the slides used in lectures in electronic form on Learning Management System (Moodle)

Recommended books :

- Introduction to Computer Architecture and Programming, Second Edition by Zeltmann, Patt, Patel, 2009
- Introduction to Programming with Java: A Problem Solving Approach, Second Edition by Dean, Dean, 2014
- Introduction to Computing Systems, Second Edition by Patt, Patel, 2004
- Brian K. Williams, Stacey Sawyer, "Using Information Technology: a Practical Introduction to Computer & Communication," 11th International Edition, McGraw Hill, 2013.

Web Sites :

<http://www.mcgrawhillcreate.com/>