



DEPARTMENT OF BACHELOR OF COMPUTER APPLICATIONS

COURSE MODULE: Computer Essentials

Course Coordinator: Prof. Prashant R Kaigaddi				Academic Year: 2024-25	
Department: Bachelor of Computer Application					
Course Code	Course Title	Core/Elective	Prerequisite	Contact Hours	Total Hrs/ Sessions
				L:T: P:S	
BCA104	Computer Essentials	PCC		3:0:0:0	40-45(TH)
Course Learning Objective:					
<ul style="list-style-type: none"> To provide foundational knowledge of computer systems, including their history, architecture, and essential operations. To equip students with practical skills in operating systems, networking, office applications, and file system management. 					
Teaching-Learning Process (General Instruction):					
<ol style="list-style-type: none"> Adopt different types of teaching methods to develop the outcomes through PowerPoint presentations and Video demonstrations. Adopt collaborative (Group Learning) Learning in the class. Adopt Problem Based Learning (PBL), which fosters students' Analytical skills and develops thinking skills such as evaluating, generalizing, and analyzing information. 					
Module-1					
Introduction to computers: History of Computing, Data Storage: Bits and Their Storage, Main Memory, Mass Storage, Representing Information as Bit Patterns, The Binary System. Data Manipulation: Computer Architecture, Machine Language, Program Execution Arithmetic/Logic Instructions.					
TLP: Power Point Presentation, Chalk and Talk					
Module-2					
Operating System Fundamentals: The History of Operating Systems, Operating System Architecture, Types of Operating System, Coordinating the Machine's Activities, Handling Competition Among Processes, Security.					
TLP: Power Point Presentation, Chalk and Talk					
Module-3					
Data Communications & Computer Networks: Components, Data Representation, Data Flow, Network Criteria, Physical Structures, network types, internet history.					
TLP: Power Point Presentation, Chalk and Talk.					
Module-4					
Office Tools: Using office tools, Creating, Saving, Closing, and Opening Office Files, Working with Files, Using the Ribbon, Tabs, and Quick Access Toolbar, Using Context Menus, the Mini Toolbar, and Keyboard					

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Shortcuts, Organizing and Customizing Folders and Files.

Usage of office tools

TLP: Power Point Presentation, Chalk and Talk

Module-5

File-System Interface: File Concept, Access Methods, Directory and Disk Structure, File- System Mounting, File Sharing, Protection, File-System Structure, File-System Implementation, Directory Implementation, Allocation Methods, Free-Space Management, Efficiency and Performance, Recovery.

TLP: Power Point Presentation, Chalk and Talk

Course outcome (Course Skill Set)

At the end of the course the student will be able to :

Sl. No. Description Blooms Level

- CO 1. Understand basic computer concepts including history, data storage, and data manipulation techniques.
- CO 2. Learn the fundamentals of operating systems and their role in managing computer resources and security.
- CO 3. Gain knowledge of data communication principles and computer networking basics.
- CO 4. Develop proficiency in using office tools for document creation, data management, and presentation.
- CO 5. Explore the structure and management of file systems including file operations, directory structures, and storage management.

Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% (50 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

Continuous Internal Evaluation:

Three Unit Tests each of **20 Marks**

Two assignments each of **20 Marks** or **one Skill Development Activity of 40 marks**

to attain the COs and POs

The sum of three tests, two assignments/skill Development Activities, will be **scaled down to 50 marks**
CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.

Semester End Examination:

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The SEE question paper will be set for 100 marks and the marks scored will be proportionately reduced to 50.

The question paper will have ten full questions carrying equal marks.

Each full question is for 20 marks. There will be two full questions (with a maximum of four sub-questions) from each module.

Each full question will have a sub-question covering all the topics under a module.

Suggested Learning Resources:

Books

1. J. Glenn Brookshear," Computer Science: An Overview", Addison-Wesley, Twelfth Edition, 2014
2. Silberschatz A, Gagne G, Galvin PB. Operating system concepts. Ninth Edition, Wiley; 2012.
3. Cobbaut P. Linux Fundamentals. Samurai Media Limited; 2016.
4. Silberschatz A, Korth HF, Sudarshan S. Database system concepts. Sixth Edition, McGraw Hill; 2010.
5. Microsoft Office 365: In Practice, 2019 Edition, 1st Edition ISBN10: 1260079902 | ISBN13: 9781260079906, By Randy Nordell, Kathleen Stewart, Annette Easton and Pat Graves @ 2020

The Correlation of Course Outcomes (CO's) and Program Outcomes (PO's)

Subject Code: BCA104		TITLE: Computer Essentials							Faculty: PRASHANT R KAIGADDI			
List of Course Outcomes	Program Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO-1	3	2	2	-				-	-	-	-	-
CO-2	2	3	2	-			2	-	-	-	-	-
CO-3	2	2	3					-	-	-	-	-
CO-4		-	2	3	3			2	2	-	-	-
CO-5	2	2	2	2	3	2		-	-	-	-	-
Total	10	9	11	6	6	4	3	2	2	0	0	0

Note: 3 = Strong Contribution 2 = Average Contribution 1 = Weak Contribution - = No Contribution