**Dr. LANKAPALLI BULLAYYA COLLEGE, VISAKHAPATNAM**

**DEPARTMENT OF COMPUTER SCIENCE**

## PROGRAM OUTCOMES

- **To train the students to get successfully employed in the computing profession or will be actively pursuing advanced degrees in computing or a related discipline.**
- **To give the students confidence of thorough grounding in the principles and practices of computing, and be properly prepared to engage in further learning.**
- **To make the students have an understanding of social and ethical issues relating to computer science and information technology, enabling them to be responsible members of their profession and informed citizens.**
- **To develop the abilities of the students in applying their knowledge and skills to succeed in their careers and/or obtain advanced degrees.**
- **To train the students to behave ethically and responsibly, and remain informed and involved as full participants in their profession and society.**
- **To give knowledge to the students to apply principles and practices of computing grounded in mathematics and science.**
- **To encourage and motivate students to successfully complete software-related projects to meet customer business objectives and/or productively engage in research.**

**COURSE OUTCOMES:**

| **SNO** | **SEMESTER-1** | **COURSEOUTCOMES:** |
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| S.no | Semester | Outcomes |
| **1** | **SEMESTER-II**<br>**Course:3**<br>**Problem solving in C** | **Course Outcomes**<br>**CO1**. Understand the working of a digital computer and Fundamental constructs of Programming<br>**CO2**. Analyze and develop a solution to a given problem with suitable control structures<br>**CO3**. Apply the derived data types in program solutions<br>**CO4**. Use the 'C' language constructs in the right way<br>**CO5**. Apply the Dynamic Memory Management for effective memory utilization |
| **2** | **Course:4**<br>**Digital Logic Design** | **Course Outcomes**<br>**CO1.**Understand how to Convert numbers from one radix to another radix and performarithmetic operations<br>**CO2.** Simplify Boolean functions using Boolean algebra and k- maps<br>**CO3.** Design adders and subtractors circuits<br>**CO4.** Design combinational logic circuits such as decoders, encoders, multiplexers and demultiplexers.<br>**CO5.** Use flip flops to design registers and counters. |

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| **3** | **SEMESTER–III**<br>**Course:5**<br>**Object Oriented Programming using Java** | **Course Outcomes:**<br>**CO1.** Understand the basic concepts of Object-Oriented Programming and Java Program Constructs<br>**CO2.** Implement classes and objects and analyze Inheritance and Dynamic Method Dispatch<br>**CO3.** Demonstrate various classes in different packages and can design own packages<br>**CO4.** Manage Exceptions and Apply Threads<br>**CO5**. Create GUI screens along with event handling |
| **4** | **Course: 6**<br>**Data Structures** | **Course Outcomes:**<br>**CO1.** Understand various Data Structures for data storage and processing.<br>**CO2.** Realize Linked List Data Structure for various operations<br>**CO3.** Analyze step by step and develop algorithms to solve real world problems by implementing Stacks, Queues data structures.<br>**CO4.** Understand and implement various searching & sorting techniques.<br>**CO5**. Understand the Non-Linear Data Structures such as Binary Trees and Graphs |
| **5** | **Course: 7**<br>**Computer Organization** | **Course Outcomes:**<br>**CO1.**Identify different types of instructions<br>**CO2.** Differentiate between micro-programmed and hard-wired control units.<br>**CO3**.Analyse the performance of hierarchical organization of memory.<br>**CO4**. Summarize different data transfer techniques.<br>**CO5**.Demonstrate arithmetic operations on fixed- and floating-point numbers and illustrate concepts of parallel processing. |
| **6** | **Course: 8**<br>**Operating System** | **Course Outcomes:**<br>**CO1.** Demonstrate knowledge and comprehension of operating system functions. |

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| | | **CO2.** Analyze different process scheduling algorithms and apply them to manage processes and threads effectively<br>**CO3.** Create strategies to prevent, detect, and recover from deadlocks, and design solutions for inter-process communication and synchronization problems.<br>**CO4.** Compare and contrast different memory allocation strategies and evaluate their effectiveness<br>**CO5.** Evaluate disk scheduling algorithms while implementing OS security measures |
| **7** | **SEMESTER-IV**<br>**Course:9**<br>**Database Management System** | **Course Outcomes:**<br>**CO1**. Differentiate between database systems and file based systems<br>**CO2.** Design a database using ER model<br>**CO3.** Use relational model in database design<br>**CO4.** Use SQL commands for creating and manipulating data stored in databases.<br>**CO5.** Write PL/SQL programs to work with databases. |
| **8** | **Course:10**<br>**Object Oriented Software Engineering** | **Course Outcomes:**<br>**CO1.** Understand and apply the fundamental principles of Object-Oriented Programming (OOP) concepts and Unified Modeling Language (UML) basics, in the development of software solutions.<br>**CO2.** Analyze and specify software requirements, develop use cases and scenarios, apply object oriented analysis and design (OOAD) principles<br>**CO3**. Familiar with the concept of test-driven development (TDD) and its practical implementation<br>**CO4.** Analyze and Evaluate Software Maintenance and Evolution Strategies<br>**CO5.** Apply Advanced Object-Oriented Software Engineering Concepts |
| **9** | **Course:11**<br>**Data Communication** | **Course Outcomes:**<br>**CO1**. Understand and apply network applications, hardware, software, and reference models for network communication.<br>**CO2**. Design and analyze data link layer protocols, multiple access |

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| | **and Computer Networks** | protocols, and wireless LAN technologies.<br>**CO3**. Design routing algorithms, congestion control algorithms, and evaluate network layer protocols for internetworking.<br>**CO4.** Analyze transport service, transport protocols, and evaluate UDP and TCP in the internet.<br>**CO5**. Understand and evaluate application layer protocols, including DNS, email, WWW, and network management protocols. |

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| **10** | **Course:12**<br>**Web Interface Designing Technologies** | **Course Outcomes:**<br>**CO1**· Analyze a web page and identify its elements and attributes.<br>**CO2** · Create web pages using XHTML and Cascading Style Sheets.<br>**CO3·** Build dynamic web pages using JavaScript (Client side programming).<br>**CO4·** Create XML documents and Schemas. |