# Programme and Course Outcome

**Department of Computer Science**

**Programme: Computer Science**

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| Programme Outcome | The curriculum in the subject of Computer Science (six semester course) prepares students for positions as:<br>• Computer Scientists/Engineers in business, industry and government.<br>• Programmers or the software engineers with the sound knowledge of practical and theoretical concepts for developing software.<br>• Hardware Designers/Engineers with the knowledge of Networking concepts.<br>• System Engineers and System integrators serve as the System Administrators with thorough knowledge of DBMS.<br>• IT officers in Banks and cooperative societies<br>• Web designers with latest web development technologies. |
| Programme Specific Outcome | The curriculum's main objectives are to impart students with an understanding of the basics of computer science, to develop proficiency in the practice of computing, and to prepare them for continued professional development.<br>Upon completion of Course in Computer Science, students will be able to:<br>• Apply algorithmic, mathematical and scientific reasoning to a variety of computational problems<br>• Design, correctly implement and document solutions to significant computational problems<br>• Analyze and compare alternative solutions to computing problems<br>• Implement software systems that meet specified design and performance requirements<br>• Work effectively in teams to design and implement solutions to computational problems. |

**Course Outcomes**

| Course | Outcomes |
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| Fundamentals of Computer | On successful completion of this course the students will be able to understand Evolution of Computers, Basic Computer Organization, Word Processing, Spread Sheets, Power Point Presentations, Basics of Operating Systems types, Internet and Cloud Computing Basics. |
| Programming in 'C' | On successful completion of this course the students will have the programming ability in C Language. |
| Data Structure using 'C' | On successful completion of this course the students will be able to demonstrate a thorough understanding of the behaviour of basic data structures. Implement data structures efficiently in programming language 'C'. Demonstrate an understanding of recursion by applying recursive techniques to solve problems |
| Computer Organisation | On successful completion of this course the students will be able to design combinational circuits using basic building blocks. Represent data in binary form, convert numeric data between different number systems and perform arithmetic operations in binary. Simplify these circuits using Boolean Algebra and Karnaugh maps. Differentiate between combinational circuits and sequential circuits. Determine various stages of instruction cycle, various instruction formats and instruction set. Explain how CPU communicates with I/O devices. |
| Database Management System | On successful completion of the course, students will be able to use database management system to manage data. Create entity relationship diagrams for modeling real-life situations and design the database schema. Use the concept of functional dependencies to remove data anomalies and arrive at normalized database design. Write queries using SQL. |

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| Operating System | On successful completion of the course students will be enabling to get sufficient knowledge on various system resources. Identify modules of the operating systems and learn about important functions performed by operating system as resource manager. Study of Unix/Linux. Use the OS in a more efficient manner. Learn to write Program in C to report behaviour of Linux kernel, CPU type and model, to Copy a file using UNIX-system calls, to implement FCFS Scheduling. |
| Software Engineering | On successful completion of the course students will be enabling to get sufficient knowledge on Engineering paradigms, Software Crisis, Software Development Process, Software Requirement Analysis, Software Requirement Analysis and Psychology of testing. |
| Computer Networks | On successful completion of the course, students will be able to understand the basics of data communication, Understand the difference between the OSI and TCP/IP protocol suit, Analog and Digital Communications Concepts, Data Link Layer, Network Layer and Routing Concepts. Practical features: Study of different types of Network cables, Network Devices, basic network command and Network configuration commands. Connect the computers in Local Area Network. Configure a Network using packet tracer software |
| Web Designing | On successful completion of the course the student should able to: Understand fundamental concepts of Internet, Internet technologies, Differentiate the features of different browsers, .Develop the colorful web pages using tags, Use bullets and alignment on texts, Understand the table handling tags, Frames and Frameset for designing web pages |