

## **DEPARTMENT OF COMPUTER SCIENCE**

Through innovative learning, nurture the student with skill for programming, for employment and higher education.

### **Program Outcome (PO):**

**PO1:** To create a learning environment for student for better understanding the fundamentals of computers and programming languages.

**PO2:** To know about the latest tools and technologies in the area of computer science.

**PO3:** Apply the knowledge of programming skill to develop software (create a solution) to solve the problem.

**PO4:** Apply the knowledge of software engineering to create qualitative software which satisfy the user needs and requirements.

**PO5:** Prepare graduates for successful career and professional work.

### **Program Specific Outcome (PSO):**

**PSO1:** Student learns various programming language, skilled in programming and create applications using programming languages.

**PSO2:** Student creates applications in the area related in web designing and stand alone applications.

**PSO3:** Software engineering concepts help student to identify various analysis, design methodologies and testing strategies to develop qualitative software.

### **Course Outcome (CO):**

**CO1:** Fundamentals of Digital Computers – To learn the computer basics, Boolean algebra, combinational and sequential circuits, integrated circuits, conversion process which will help to understand the concepts of computer architecture.

**CO2:** Programming in C- To understand the concepts of structured programming and implement the concepts by writing programs.

**CO3:** Digital Electronics and Microprocessor- To learn about integrated circuits, simplification of Boolean algebra and assembly language. Understand about 8085 microprocessor pin architecture, peripherals, programming model and hardware model.

**CO4:** Programming with C++ - To gain knowledge about OOPS concepts such as polymorphism, inheritance, class, object and learn the data structure types and operations on data structures.

**CO5:** Programming in Java – To gain knowledge about basic Java and fundamentals of OOPS. Use SDK environment to create a solution for problem and implement exception handling and multithreading concepts.

**CO6:** Operating System- To gain knowledge about operating system and its types, multithreading, multitasking, CPU scheduling, deadlock.

**CO7:** Computer Graphics – To learn the fundamentals of animation and understand the concept 2D, 3D and projection categories.

**CO8:** Database Management System – Understand the concepts of basic database system and SQL queries and oracle, understands the transactions.

**CO9:** Visual Programming – To understand the concepts of customizing the form, procedures, multiple forms and monitoring the mouse activity.

**CO10:** Software Engineering – To understand the software engineering concepts(analysis, design, coding, testing, implementation), software models, testing strategies and quality control to provide a good quality software.

**CO11:** Computer Organization and Architecture- To gain knowledge about basic concepts of computer, addressing modes and RISC, CISC, micro-operations.

**CO12:** Web Technology – To understand the basics concepts of Internet (HTML), Tags, ASP,JSP, Vbscript, Javascript.

**CO13:** Data communication Networking- To learn about networking and how data can be communicated from source to destination, transmission types, error checking while transmitting data.

**CO14:** Software Testing- To understand the testing categories applied on software, which helps to provide qualitative software satisfy the user needs.

**CO15:** Multimedia- To understand the multimedia concept and learn the elements of multimedia (Text, Audio, Video, Image) projected in multimedia project

**CO16:** Object Oriented Analysis and Design- To focusing the concept of analysis and design of software development ,UML concepts , methodologies of Rumbaugh, Jacobson and Booch

**CO17:** Internet technology-To understand the technology of internet and protocols (TCP/IP, SMTP,FTP, TELNET, HTTP), Hubs, switches, routers.

**CO18:** Computer networks- To understand the concepts of OSI reference model, network layer, transport layer, transmission media, routing algorithms, cryptography

**CO19:** Design and analysis algorithm- To learn the concepts of algorithms, back tracking, dynamic programming, lower bound theory

**CO20:** Advanced Java programming- To learn about servlets, JDBC, Java beans, EJB architecture, Perl, RMI, Stubs and skeletons, RMI,JSP, J2EE.

**CO21:** Information security- To understand the security attacks, malicious code, protection mechanisms, authentication, database security, cryptography, risk analysis.

**CO22:** Mobile computing- To understand about telecommunication system, architecture, UMTS, Mobile network layer, GSM, routing strategies, security, congestion control.