

**COURSE OUTCOME (PO), COURSE SPECIFIC
OUTCOME(PSO)**

Course Outcome

	Title of the course	Course Outcome
Semester I	English -I	Confidentially use English in both written and spoken forms. And also use English for formal communications effectively.
	Mathematics	The student will be able to identify and use set properties and set notations. The student will be able to perform set operations. The student will be able to solve applications involving sets. Learning number theory helps improving one's ability of mathematical thinking.
	Fundamentals of Digital Systems	Analyze digital circuits such as combinational logic circuits, clocking and timing circuits, and analog-to-digital and digital-to-analog devices; troubleshoot various digital circuits using schematic diagrams; and solve problems involving binary, octal, decimal, and hexadecimal numbering systems.
	Computer fundamentals and Basics of PC Hardware	Students will be able to understand the basic components and functioning of the computer. To give knowledge about the various electronics components and digital circuits to the students and designing various building block of computer system.
	Methodology of programming and C language	Programming methodology deals with the analyses, design and implementation of programme. Programming methodology is just a programming practice tom help the students to plan and structure more defined way. The primary programming language for coding ODS based applications.
	Software Lab I	The objective of the course is to help the students in

		finding solutions to various real life. Problems and converting the solution in to computer programme using C language(Structured programming. Students will learn to write programmes for solving various real-life problems.
Semester 2	English	By the end of the course, the learner should be able to identify major issues of contemporary significance and to respond rationally and positively to the issues raised.
	Mathematics	This syllabus is specially designed to help the students of computer science to understand the mathematical concepts like matrices and graph theory which have applications in various subjects of computer science.
	Data Communication	The course objectives include learning about computer network organization and implementation, obtaining a theoretical understanding of data communication and computer networks, and gaining practical experience in installation, monitoring, and troubleshooting of current LAN systems
	Computer Organization and Architecture	To learn the machine level representation of data, instructions sets ,computer arithmetic, CPU structure and functions, memory system organization, scheduling system I/O ,multiprocessor and digital logic.
	Object oriented programming using C++	The main aim of OOP is to bind data and function together, No other part of the code can access this data except that function.
	Software Lab- II	The major objective of this lab is to provide a strong formal foundation in database concepts and C ++.
	Probability and statistics(complementary)	Understand the types of questions that the statistical method addresses. Apply the method to other examples and situations;
	System Analysis and Design	The objective of this course is to make students familiar with all the software development principles, models and designing tools required to develop the

		software.
Semester III	Networking Fundamentals	The course objectives include learning about computer network organization and implementation, obtaining a theoretical understanding of data communication and computer networks, and gaining practical experience in installation, monitoring, and troubleshooting of current LAN systems
	DataBase Management System	This course is intended to provide you with an understanding of the current theory and practice of database management systems. To help you more fully appreciate their nature, the course provides a solid technical overview of database management systems, using a current database product as a case study. In addition to technical concerns, more general issues are emphasized.
	Data Structure using C++	To introduce the concepts of Abstract data Type, data structure, performance measurement, time and space complexities of algorithms. To discuss the implementation linear data structures such as stacks, queues and lists and their applications. To discuss the implementation of different nonlinear data structures such as trees and graphs. To introduce various search data structures such as hashing, binary search trees, red black trees, splay trees and b-trees. To introduce various internal sorting techniques and analyze their time complexities.
	Software Lab III	To develop skills to design and analyze simple linear and nonlinear data structures To Strengthen the ability to identify and apply the suitable data structure for the given real world problem To Gain knowledge in practical applications of data structures
Semester	Computer Aided	The objective of Computer Aided Optimization

IV	Optimization Techniques (complementary)	Techniques, as a mathematical discipline, is to establish theories and algorithms to model and solve mathematical optimization problems that translate to real life decision making problems.
	Microprocessor and Assembly Language Programming	Demonstrate the internal architecture and its general operations of microprocessors and describe the difference between the 8086 and advanced microprocessors. Design and analyze assembly programming code to use the branching structures, looping structures flags, stacks, procedures, macros, and interrupts.
	Linux Administrations	The Linux Administrator role is pivot for any organization. To be a successful Linux system administration candidate have to be an excellent self-starter, be highly motivated and be willing to follow instructions.
	Web Programming Techniques	Web programming refers to the writing ,markup and coding involved in Web Development. PHP is a script language and interpreter that is freely available and used primarily on Linux Web Servers.
	Software Lab IV	To study the Web Programming using PHP
	Assembly Language Programming Lab	To study the Assembly Language Programming
Semeste V	System Software and Operating Systems	To study how operating system act as an interface between applications program and computer hardware.
	IT and Environment	To learn the role of IT in environmental impact assessment and environment audit.
	Java Programming using Linux	The objective of this course is to let students understand basics of java programming language, development of programs and database connectivity.
	Computer Security	
	Software Lab V	Applet, JDBC connection and swing based Programs

	Software Development Lab I (Mini Project)	Mini project shall be a small complete project, to make the student confident in designing a system based on System Analysis & Design course, using php and SQL Server/ ORACLE.
Semeste VI	Computer Graphics	To learn how graphics created in computer world
	Big Data : Analytics	
	Python and Latex	
	Seminars	The student shall choose a modern topic of current day interest in the areas of Computer Science Information Technology and present a seminar using appropriate presentation media such as LCD projector.
	Software Development Lab II (Main Project)	The project topic shall be chosen from areas of current day interest using latest packages / languages running on appropriate platforms (Except the tools used in software development-I), so that the student can be trained to meet the requirements of the Industry. A project report should be submitted in hard bound complete in all aspects. For internal evaluation, the progress of the student shall be systematically assessed through various stages of evaluation at periodic intervals.
	Viva voce	Scheme of Evaluation of Viva voce (core) for External is as follows: Each student should attend a course viva voce based on syllabus from semester I to semester IV