Name of the Programme: B. Sc. Computer Science

S No	Title of the Paper	Course Code	Course Objectives	Course Outcomes	Relevance
1	PROBLEM SOLVING TECHNIQUES	CS120	• To develop problem solving skills with top-down design principles. • To become competent in algorithm design and program implementation. • To develop skills to apply appropriate standard methods in problem solving	• Upon Completing the Course, Students will be able to: • Develop programming techniques required to solve a given problem. • Develop problem solving skill using top – down design principles. • Design an algorithm for a problem. • Develop techniques to handle array structure • Develop techniques such as searching and sorting	**Regional**
2	DIGITAL COMPUTER FUNDAMENTALS	CS221	• To explore the Number System, Number Conversion from one Base to another Base and Complements. • To understand the Logic Gates, Boolean Algebra and to design	• Perform conversions among different number systems, to be familiar with basic logic gates, • Draw the Logic circuits and truth table for Boolean	**Regional**

			the Logical Circuits. • To simplify the Boolean Functions using K-Map Method • To Learn Combinational circuits as Adders and Subtractors, Encoders and Decoders. • To Learn the different types of Flip-Flops such as SR Flip flop, JK Flip flop, T Flip flop and D Flip flop.	functions • Simplify Boolean functions by using k-map method and Boolean Laws and Theorems. • Design of combinational circuits such as Adder, Subtractor, Multiplexer, Encoder and Decoder etc. • Understand the design of sequential Circuits such as Flip-Flops, Edge-trigger and master slave flip flops.	
3	COMPUTER ORGANIZATION AND ARCHITECTURE	CS322	• To understand the basics of Computer Organization. • To know the relationship between computer instruction and the Machine code execution. • To know about the various types of CPU Organization and Addressing Modes. • To recognize the need of interface between CPU and Input / Output devices. • To think critically, independently, and quantitatively about Computer Memory.	• Study basic computer organization, design and micro-operations. • Prepare machine code from the instructions • Understand CPU organization and different types of addressing modes. • Understand how the Input/ Output devices communicate with the computer • Learn various methods and techniques of memory organization.	**Regional**
4	COMPUTER GRAPHICS	CS544 A	• Understand the Role and importance of Algorithms like Line drawing Algorithm, Circle drawing Algorithm, Character generating Algorithm. • Understand 2D and 3D Transformations. • Understand various Clipping	• To provide comprehensive introduction about computer graphics system, design and two-dimensional transformations. • To make the students familiar with techniques of clipping, three dimensional graphics	**Regional**

			Algorithms like point clipping, line clipping and polygon clipping. • Understand the importance of the User Dialogue and various input functions. • Understand the Visible Surface Detection Methods.	and three dimensional transformations. • Prepares the students for activities involving in design, development and testing of modeling, rendering, shading and animation	
5	MOBILE APPLICATIONS DEVELOPMENT	CS633	• To develop a mobile application. • To understand the concept of SQLite	Upon completion of this course, students should be able to: • Describe the platforms upon which the Android operating System will run. • Create a simple application that runs under the Android operating system. • Access and work with the Android file system. • Create an application that uses multimedia under the Android operating system. • Access and work with database under the Android operating system.	**Regional**
6	MICROPROCESSOR USING 8086/88	CS636	• To Understand the basic architecture of the Microprocessor • To learn the instruction sets of the processor • To write applications using assembly level language program • To study the input/output interfaces of the processor • To understand the importance of interrupts in programming	At the end of the course, students should be able to: • Identify the types of instructions and the organization of registers and memory • Describe the translation model of assembly language to machine language. • Understand the micro-program by mapping the instructions. • Recognize the types of	**Regional**

				computer organizations. • Accept the better ways of Parallel and Vector processing.	
7	COMPUTER NETWORKS	CS637 A	• To learn the basic concepts of Computer Networks	• To explain how communication works in computer networks and to understand the basic terminology of computer networks • To explain the role of protocols in networking and to analyze the services and features of the various layers in the protocol stack. • To understand design issues in Network Security and to understand security threats, security services and mechanisms to counter it.	**Regional**