

Program Name	Course Code	Course Name	Course Outcomes
BSc IT Semester I	USIT101 & USIT1P1	Imperative Programming	To develop basic programming skills using C language. To write algorithms and flowcharts.
	USIT102 & USIT1P2	Digital Electronics	Perform conversions among different number systems, became familiar with basic logic gates and understand Boolean algebra and simplify simple Boolean functions by using basic Boolean properties & design of combinational circuits such as MUX, DEMUX, Encoder and Decoder etc. Understand the design of sequential Circuits such as Flip-Flops, Registers, and Counters. Obtain a basic level of Digital Electronics knowledge and set the stage to perform the analysis and design of Complex Digital electronic Circuits
	USIT103 & USIT1P3	Operating Systems	To make students able to learn different types of operating systems along with concept of file systems and CPU scheduling algorithms used in operating system. To provide students knowledge of memory management and deadlock handling algorithms.
	USIT104 & USIT1P4	Discrete Mathematics	Enable the students to understand and create mathematical arguments and solving them with logical skills. Enable the students to learn Number Theory, Which is applied in data security and Networking. Enable the students to learn Set Theory, Graph Relations, functions which are used in cryptography and data structures, basic concepts of Graph Theory
	USIT105 & USIT1P5	Communication Skills	To develop inter personal skills and be an effective goal oriented team player. To develop professionals with idealistic, practical and moral values. To develop communication and problem solving skills To re-engineer attitude and understand it s influence on behavior
BSc IT Semester II	USIT201 & USIT2P1	Object oriented Programming	Be able to understand the difference between object oriented programming and procedural oriented language and data types in C++. Be able to program using C++ features such as composition of objects, Operator overloading,

			inheritance, Polymorphism etc.
	USIT202 & USIT2P2	Microprocessor Architecture	Introduction to the Architecture and programming of the microprocessor 8085. Learning about interfacing and various applications of microprocessor. A study of advanced microprocessors.
	USIT203 & USIT2P3	Web Programming	Implement interactive web page(s) using HTML, CSS and JavaScript. Design a responsive web site using HTML5 and CSS3. Demonstrate Rich Internet Application. Build Dynamic web site using server side PHP Programming. Describe and differentiate different Web Extensions and Web Services.
	USIT204 & USIT2P4	Numerical and Statistical Methods	To develop problem solving skills. To Apply different Statistical Methods.
	USIT205 & USIT2P5	Green Computing	Describe awareness among stakeholders and promote green agenda and green initiatives in their working environments leading to green movement Identify IT Infrastructure Management and Green Data Centre Metrics for software development. Recognize Objectives of Green Network Protocols for Data communication. Use Green IT Strategies and metrics for ICT development. Illustrate various green IT services and its roles.
BSc IT Semester III	USIT301 & USIT3P1	Python Programming	To learn Basics, Decision making and Functions, GUI programming and Database Operations in Python
	USIT302 & USIT3P2	Data Structures	To access how the choices of data structure & algorithm methods impact the performance of program. To Solve problems based upon different data structure & also write programs. Choose an appropriate data structure for a particular problem.
	USIT303 & USIT3P3	Computer Networks	To understand the fundamental concepts of computer networking and provide the knowledge of different protocols at different layers of models. Learn how the data is transferred between the computers over the network

	USIT304 & USIT3P4	Database Management Systems	<p>Gain a good understanding of the architecture and functioning of database management systems as well as associated tools and techniques, principles of data modeling using entity relationship</p> <p>To Develop a good database design and normalization techniques to normalize a database.</p> <p>Understand the use of structured query language and its syntax, transactions, database recovery and techniques for query optimization</p>
	USIT305 & USIT3P5	Applied Mathematics + Practical Mobile Programming	<p>Apply Matrix theory to different applications</p> <p>Understand complex number and its different applications</p> <p>Apply Laplace transform to different applications</p> <p>Apply Inverse Laplace transform to different applications.</p> <p>Apply multiple integrals to various applications</p> <p>To get the knowledge of cordova</p>
BSc IT Semester IV	USIT401 & USIT4P1	Core Java	<p>Learn the basic concepts & techniques of java.</p> <p>Learn the advanced concepts of java.</p> <p>Generate an application based upon the concepts of java & advance java.</p>
	USIT402 & USIT4P2	Introduction to Embedded Systems	<p>To introduce the embedded Hardware and Interfacing.</p> <p>To make the students familiar with software development & tools for embedded systems.</p> <p>The objective of the course is to cover the Hardware Design, Software Development & RTOS for the Embedded Systems</p>
	USIT403 & USIT4P3	Computer Oriented Statistical Techniques	<p>Install and use R for simple programming tasks.</p> <p>Extend the functionality of R by using add-on packages</p> <p>Extract data from files and other sources and perform various data manipulation tasks on them.</p> <p>Code statistical functions in R.</p>
	USIT404 & USIT4P4	Software Engineering	<p>Define various software application domains and remember different process model used in software development.</p> <p>Explain needs for software specifications also they can classify different types of software requirements and their gathering techniques.</p> <p>Convert the requirements model into the design model and demonstrate use of software and user interface design principles.</p>
	USIT405 &	Computer	To provide comprehensive introduction about computer

	USIT4P5	Graphics and Animation	graphics system, design algorithms and two dimensional transformations. To make the students familiar with techniques of clipping, three dimensional graphics and three dimensional transformations.
BSc IT Semester V	USIT501 & USIT5P1	Software Project Management + Practical	Carry out an evaluation and selection of projects against strategic, technical and economic criteria and use a variety of cost benefit evaluation techniques for choosing among competing project proposals. Approach project planning in an organized step by step manner and select an appropriate process model produce an activity plan for a project. Identify project risks, monitor and track project deadlines and produce a work plan and resource schedule. Plan the evaluation of a proposal or a product and manage people in software environments. Understand the importance of teamwork and quality management in software project management.
	USIT502 & USIT5P2	Internet of Things + Practical	Apply the concepts of IoT. Understand IoT with different applications. Understand the prototype design for IoT
	USIT503 & USIT5P3	Advanced Web Programming + Practical	Understand the .NET framework Develop a proficiency in the C# programming language Proficiently develop ASP.NET web applications using C# Use ADO.NET for data persistence in a web application
	USIT504 & USIT5P4	Artificial Intelligence + Practical	To introduce the basic concepts of Artificial Intelligence, with illustrations of current state of the art research and applications. To recognize the characteristics of AI that make it useful to real-world problems. To identify the type of an AI problem(search inference, decision making under uncertainty, game theory,etc.) To describe the strengths and limitations of various state-space search algorithms,and choose the appropriate algorithm. Understand different learning algorithms and models used in machine learning
	USIT505 & USIT5P5	Linux System Administration +Practical	Classify Linux Kernel mode with user mode & contrast between Kernel structures. Identify and estimate process management & thread management strategies along with their different operations

			<p>Implement different system calls for various file handling operations.</p> <p>Determine paging and Caching techniques related to Virtual Memory.</p>
	USIT506 & USIT5P6	Enterprise Java + Practical	<p>Provide the ability to design console based, GUI based and web based applications.</p> <p>To understand integrated development environment to create, debug and run multi-tier and enterprise-level applications</p> <p>Understand the concepts related to Java Technology</p> <p>Explore and understand use of Java Server Programming</p>
	USIT507 & USIT5P7	Next Generation Technologies +Practical	<p>Explain the motivation for big data systems and identify the main sources of Big Data in the real world.</p> <p>Demonstrate an ability to use frameworks like NOSQL to efficiently store retrieve and process Big Data for analytics.</p>
BSc IT Semester VI	USIT601 & USIT6P1	Software Quality Assurance + Practical	<p>Formulate problem by following Software Testing Life Cycle.</p> <p>Design Manual Test cases for Software Project.</p> <p>Identify the realistic problem for different category of software.</p> <p>Use automation testing tool students will be able test the software</p> <p>To implement and test a software project using SDLC model.</p> <p>Describe Android platform, Architecture and features.</p> <p>Design User Interface and develop activity for Android App.</p>
	USIT602 & USIT6P2	Security in Computing + Practical	<p>To understand design issues in Network Security and to understand security threats, security services and mechanisms to counter them.</p>
	USIT603 & USIT6P3	Business Intelligence + Practical	<p>To understand the importance of data mining and the principles of business intelligence</p> <p>Organize and Prepare the data needed for data mining using pre preprocessing techniques</p> <p>Perform exploratory analysis of the data to be used for mining.</p> <p>Apply BI to solve practical problems : Analyze the problem domain, use the data collected in enterprise apply the appropriate data mining technique, interpret and visualize the results</p>

	USIT604 & USIT6P4	Principals of Geographic Information Systems + Practical	Understand nature of GIS. Identify trends in hardware and softwares used in GIS
	USIT605 & USIT6P5	Enterprise Networking + Practical	Understand the customer requirements and Apply a Methodology to Network Design Structure and Modularize the Network Design Basic Campus and Data Center Network. Design Remote Connectivity Design IP Addressing and Select suitable Routing Protocols for the Network Compare Openflow controllers and switches with other enterprise networks.
	USIT606 & USIT6P6	IT Service Management + Practical	Describe the importance of IT enabled services and challenges. Identify strategic IT planning for software development. Use their skills to find out various current IT trends in ITES.
	USIT607 & USIT6P7	Cyber Laws +Advanced Mobile Programming	To understand the concept of cyber space, netizens and various types of cyber crimes. To study Legal aspects of E-Commerce, IPR and Domain Name resolution. Discuss scope and limitations of IT Act of India To get the knowledge of Android programming