

BSC. IT

| Semester I/II/III/IV/V/VI | All Subjects / Course | Objective of teaching the subject (Minimum 4) | OUTCOMES |
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| Sem-I | USIT101 Core Subject Imperative Programming 2 USIT102 Core Subject Digital Electronics 2 USIT103 Core Subject Operating Systems 2 USIT104 Core Subject Discrete Mathematics 2 USIT105 Ability Enhancement Skill Course Communication Skills | 1) To think analytically, creatively and critically in developing robust,extensible and highly maintainable technological solutions to simple and complex problems. | To provide an overview of an basic programming skills. |
| | | 2)To apply their knowledge and skills to be employed and excel in IT professional careers and to continue their education in IT and related post garduates programmes. | Apply number conversion techniques in real digital systems. Solve boolean algebra expressions |
| | | 3)To work effectively as a part of a team to achieve a common stated goal. | Learners will be able to:Use logical notation, Perform logical proofs |
| | | 4)To communicate effectively with a range of audiences both technical and non-technical. | Learners will be able to: Analyze, synthesize and utilize the process and strategies from delivery to solving communication problem, Learn the communication methodologies at workplace and learning about importance of team collaboration. |
| Sem-II | USIT201 Core Subject Object oriented Programming 2 USIT202 Core Subject Microprocessor Architecture 2 USIT203 Core Subject Web Programming 2 USIT204 Core Subject Numerical and Statistical Methods 2 USIT205 Ability Enhancement Skill Course Green Computing 2 | 1)To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct. | Learners will be able to:Understand the concept of OOPs, feature of C++ language, Understand and apply various types of Datatypes, Operators, Conversions while designing the program. |
| | | 2)To develop an aptitude to engage in continuing professional development. | Learners will be able to: Understand the basic concepts of Micro Computer Systems, Understand the architecture and hardware aspects of 8085 and Write assembly language programs in 8085 |
| | | 3)To be capable of managing complex IT projects with consideration of the human, financial and environmental factors | Gain an insight into designing web pages. Use different ways of styling web pages using CSS, javascript and PHP. |
| | | 4)To make the students employable and impart industry oriented training. | Understand numerical techniques to find the roots of non-linear equations and solution of system of linear equations. |
| | | 5)To be fundamentally strong at core subject of Information Technology. | Learners will be able to: Understand the concept of Green IT and problems related to it, Know different standards for Green IT. |
| sem III | USIT301 Skill Enhancement Course Python Programming 2 USIT302 Core Subject Data Structures 2 USIT303 Core Subject Computer Networks 2 USIT304 Core Subject Database Management Systems 2 USIT305 Core Subject Applied Mathematics 2 | 1)Offers focus on core computer subjects and mathematical and statistical models. | Build basic programs using fundamental programming constructs ike variables, conditional logic, looping and functions in python. |
| | | 2) To understand the network protocols, architectures. | To devlope skills to design and analyse simple linear and nonlinear data stucture. |
| | | 3)able to apply knowledge of Software Defined Networking as per industry standards. | Define and describe the fundamental elements of relational database management system. |
| | | 4)To provide students with theoretical knowledge and practical skills in advanced topics in database systems, | To understand protocols in networking and how networking is done |

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| sem IV | USIT401 Skill Enhancement Course Core Java 2 USIT402 Core Subject Introduction to Embedded Systems 2 USIT403 Core Subject Computer Oriented Statistical Techniques 2 USIT404 Core Subject Software Engineering 2 USIT405 Core Subject Computer Graphics and Animation 2 | 1)Understand basic components and functionalities of Embedded System including its hardware | Review the fundamental concepts of a computer graphics and implementation of basic algorithms. |
| | | 2)The course is designed to enable students, to understand and implement JAVA in industry. | To obtain an intuitive and working, understanding of statistical methods. |
| | | 3)Effectively achieve collaboration of various technologies in Embedded System and enable the same using software programming like Python, Embedded C | Students will be capable to acquire the generic software development skill through various stages of software life cycle. |
| | | 4)Able to use efficient soft skills for professional development. | Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs. |
| sem V | USIT501 Software Project Management 2 USIT502 Internet of Things 2 USIT503 Advanced Web Programming 2 USIT504 Artificial Intelligence 2 USIT507 Next Generation Technologies 2 | 1)Broad understanding of latest technological trends. | To enable students to have skills that will help them to solve complex real-world problems in for decision support. |
| | | 2)Design and executive projects in IoT with Automatic Identification and Data Capture. | Gain a thorough understanding of the philosophy and architecture of Web applications using ASP.NET |
| | | 3)to understand and implement IoT in industry. | Learners will be able to know advanced concepts of IoT and recent trends in them. |
| | | 4)To apply programming and computational skills for industrial solutions. | To introduce the tools required to manage and analyze big data like mongodb, NoSql MapReduce. |
| sem VI | USIT601 Software Quality Assurance 2 USIT602 Security in Computing 2 USIT603 Business Intelligence 2 USIT605 Enterprise Networking USIT606 IT Service Management 2 | 1)Inclusion of Project as part of the internal assessment is an attempt to translate theory into practice. | To understand the state-of-the-art in network protocols, architectures and applications. Analyze existing network protocols and networks. |
| | | 2)To Expand Students, view and introduce advanced topics and Business Intelligence. | To teach the fundamental techniques and principles in achieving big data analytics with scalability and streaming capability. |
| | | 3)Focus on using open source softwares. | To develop the foundation for the study of security and its use in computing. |
| | | 4)Understand and develop analytics for social media data. | Understand ways to protect system and digital assets |