



### Department of Information Technology

### B.Sc. Information Technology

S.No.	Course Code	Course Name	Course Outcomes
SEMESTER - I			
1.	18UITC11	Core Course- I : Foundation Course- Programming in C	<ol style="list-style-type: none"><li>1. Gain the experience about structured programming.</li><li>2. Help the students to understand the implementation of C language.</li><li>3. Understand the syntax and semantics of the C language as well as data types offered by the language.</li><li>4. Provide the ability to work with characters and strings.</li><li>5. Let the students to know the power of Modular Programming through Functions.</li><li>6. Provide skills to use Pointers for dynamic programming.</li><li>7. Enhance the knowledge on storage through using Files.</li></ol>
2.	18UITC1P	Core Course –II: Programming in C Lab	<ol style="list-style-type: none"><li>1 Understand and trace the execution of programs in C language.</li><li>2 Learn the knowledge in operations using derived data types.</li><li>3 Acquire the skills of user defined data types.</li><li>4 Learn the conditional and iterative statements in C programs.</li><li>5 Understand the function and its parameters.</li><li>6 Understand the Pointers to access arrays, strings and functions.</li></ol>



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3.	18UITN11	Non Major Elective Course – I: Office Automation	1 Give the knowledge of Microsoft word instruction. 2 Create the document & learning the Mail Merge concept. 3 Simplify the operations and minimizing manual errors by using Excel. 4 Help the Data management operation using Access. 5 Gain the presentation ability through Power point.
4.	18UITE1P	Enrichment Course – I: PC Software Lab	1. Give the basic knowledge on MS word. 2. Design the creation of newspaper format with header & footer. 3. Learn how to do Mail Merge practically. 4. Provide the ability to understand Excel functions.
<b>SEMESTER – II</b>			
5.	18UITC21	Core Course III: Object Oriented Programming with C++	1. Understand how C++ Improves C with Object-Oriented Features. 2. Learn the Syntax and Semantics of the C++ Programming Language. 3. Know the working Mechanism of Inline Functions and Constructors. 4. Learn the Skills of Overload Functions and Operators in C++. 5. Know the Methodology of Inheritance, Virtual Functions and Implement Dynamic Binding with Polymorphism. 6. Understand the concept of Data Abstraction, Encapsulation in C++. 7. Learn the Design and Implementation of Generic Classes



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			with C++ Templates. 8. Learn how to use Exception Handling in C++ Programs.
6.	18UITC2P	Core Course IV: Object Oriented Programming with C++ Lab	1. Improve Problem Solving Skills using C++. 2. Understand the difference between C Structures and C++ Classes. 3. Enable the students to effectively use Constructors & Destructors. 4. Implement the Programs to obtain Functions and Overloading concept. 5. Learn the concept of various Inheritance Techniques. 6. Know the Methodology of Exception Handling Mechanisms. 7. Implement the File concepts using C++.
7.	18UITN21	Non Major Elective Course II: Computer Hardware and Installation	1. Learn the Fundamentals of Hardware and its Functions. 2. Learn the various types of Personal Computer and Knowledge about Motherboard, Bios, and CMOS. 3. Understand the various Display Technology and Output Devices. 4. Learn the concept of PC Installation and Trouble Shooting.
8.	18UITE2P	Enrichment Course II: Digital Principles Lab	1. Apply the Principles of Boolean algebra to Manipulate and Minimize Logic Expressions. 2. Understand the basic Principles of Digital Systems. 3. Design Logic Functions with AND, OR, NAND, NOR and XOR Gates with Minimum Number of Gate Delays or Literals.



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			4. Understand the Functions of Combinational Circuits.
<b>SEMESTER – III</b>			
9.	18UITC31	Core Course – V: Computer Organization	<ol style="list-style-type: none"><li>1. Apply the principles of Boolean algebra to manipulate and minimize Logic Expressions.</li><li>2. Understand the basic Principles of Digital Systems.</li><li>3. Design Logic Functions with AND, OR, NAND, NOR and XOR gates with minimum number of gate delays or literals.</li><li>4. Understand the use of K-maps to minimize and optimize two-level Logic Functions.</li><li>5. Analyze the Operation of Sequential Circuits that built with various Flip-Flops.</li><li>6. Understand the concepts of Data Paths, Control Units, and Micro-Operations and building blocks of Digital Systems.</li><li>7. Articulate how modern Microelectronic has impacted society.</li></ol>
10.	18UITC3P	Core Course – VI: Data Structures and Algorithms Lab	<ol style="list-style-type: none"><li>1. Improve the ability of Students to choose appropriate Data Structure as applied to specified problem definition.</li><li>2. Get the knowledge on efficient Storage mechanisms of data for an easy access.</li><li>3. Know the different Searching Algorithms.</li><li>4. Able to use linear and non-linear Data Structures like Stacks, Queues.</li></ol>



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			5. Understand the simple Sorting Algorithms. 6. Learn the complex Sorting Algorithms that produce less time complexity than other Algorithms. 7. Understand the various Linked list concepts.
11.	18UITA31	Allied Course-III: Data Structures and Algorithms	1. Understand the basic concepts of Data Structures and algorithms. 2. Understand the concepts about Searching and Sorting techniques. 3. Learn the basics about Dynamic Data Structure. 4. Know about algorithm design paradigm based on multi-branched Recursion. 5. Understand the concepts of Stack, Queue and gaining knowledge on Trees. 6. Understand simple Sorting algorithms that repeatedly Sort. 7. Understand the concepts about Searching and Sorting techniques.
12.	18UITS3P	Skill Based Course – I: Web Lab	1. Design and Implement Dynamic Websites with Good Aesthetic Sense. 2. Design Web Pages through Code using HTML. 3. Gain knowledge about Creation of Application Form in Web Page. 4. Construct Pages that meet the needs of an Identified Audience.
13.	18UITV31	Value Based Course – I:	1. Understand the role of an ERP in carrying out Business



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		Enterprise Resource Planning	processes in a company. 2. Learn the best Business practices incorporated in an ERP. 3. Understand the challenges associated with implementing ERP Systems and their Impacts on organizations. 4. Gain the Knowledge of ERP in E-Business.
14.	18UITEXP	ECC Course I: Computer Typewriting in English	1. Understand the importance of touch keyboard. 2. Learn the correct keyboard techniques. 3. Gain the knowledge of creating business documents using type writing. 4. Understand about shortcut keys for fingering.
15.	18UITEXQ	Extra Credit Course II: Animation in Web	1. Understand the package Adobe Photoshop. 2. Mold the student to draw different shapes with their designing skills. 3. Provide the knowledge to create the various images with animations. 4. Create interesting edited images.
<b>SEMESTER – IV</b>			
16.	18UITC41	Core Course – VII: Operating System	1. Learn the fundamentals of Operating Systems. 2. Understand the structure and services of Operating System. 3. Learn the mechanisms to handle process and its Communication. 4. Know the scheduling algorithms of CPU. 5. Provide the knowledge of basic concepts towards process synchronization and related





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			issues. 6. Learn the memory management capability techniques in OS. 7. Gain the knowledge on handling multi processor problems.
17.	18UITC4P	Core Course – VIII: RDBMS Lab	1. Give the good formal foundation on the Relational Model of Data. 2. Understand the DDL Commands and DML Commands. 3. Learn the concepts and techniques related to Query processing by SQL engines. 4. Define own Exceptions according to the need of program. 5. Understand the Cursor programming concept in PL/SQL. 6. Gain the programming skills in PL/SQL using Packages and Functions
18.	18UITA4P	Allied Course – IV: OS Lab	1. Learn the basic UNIX commands. 2. Understand the concept of C Programming with UNIX. 3. Get the knowledge on Directory structure commands. 4. Understand the SED command and its purpose. 5. Learn the ideas about using the AWK and GREP commands.
19.	18UIT041	Major Elective Course – I: RDBMS	1. Provide introduction to the discipline of database management. 2. Give the systematic database design approaches in RDBMS. 3. Learn the formal foundation on the entity relationship model of data. 4. Acquire the concepts and techniques related to query processing by SQL engines. 5. Get the familiarizations of SQL programming concepts using



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			PL/SQL. 6. Provide a way to execute procedural logic on the database. 7. Learn the skills to use PL/SQL program associated with specific database table to implement various concept.
20.	18UIT042	Major Elective Course – I: Computer Graphics and Multimedia	1. Understand the structure of modern computer graphics systems. 2. Understand the basic principles of implementing computer graphics primitives. 3. Familiarity with key algorithms for modeling and rendering graphical data. 4. Develop design and problem solving skills with application to computer graphics. 5. Provide knowledge on Text, Audio and Video. 6. Make students to analyze image its formats.
21.	18UIT043	Major Elective Course - I: Consumer Affairs	1. The learners know about the need for consumer protection and the areas covered by consumer protection law 2. Learners will have a clear idea on legislative controls on unconscionable conduct, misleading or deceptive conduct, false or misleading representations and other unfair practices 3. The learners know the legal obligations of a supplier of goods or services 4. The learners know the obligations of manufacturers and the rights of consumers to





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			compensation 5. The learners know the bodies available to protect the rights of the consumer and discuss their operations.
22.	18UITEXR	ECC Course III: Computer Type Writing in Tamil	1. Understand the importance of touch keyboard in Tamil. 2. Learn correct keyboard techniques in Tamil. 3. Gain the knowledge of creating business documents using type writing in Tamil. 4. Understand about shortcut keys for fingering.
23.	18UITEXS	Extra Credit Course IV: Macromedia Flash	1. Acquire the skills to create the animation. 2. Mold the student to draw different shapes with their designing skills. 3. Provide the knowledge to create the various images with animations. 4. Provide knowledge on flash buttons
<b>SEMESTER - V</b>			
24.	18UITC51	Core Course IX: Programming in Java	1. Learn the basic concept of Java Programs. 2. Learn basics like Loops, Arrays, Input/Output Structures, Events, Exceptions, and Threads. 3. Understand various Forms of Data, Control and Object Structures supported by the Java language. 4. Understand the interaction with Files in Java. 5. Learn the importance of AWT and Applets.



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			6. Understand the Graphical User Interface components.
25.	18UITC52	Core Course – XI: Computer Networks	<ol style="list-style-type: none"><li>1. Learn how Communication Works in Computer Networks and to understand the Basic Terminology of Computer Networks.</li><li>2. Understand the Role of Protocols in Networking and to analyze the Services and Features of the various Layers in the Protocol Stack.</li><li>3. Provide Students with an Overview of the concepts and Fundamentals of Data Communication and Computer Networks.</li><li>4. Familiarize with the Basic Taxonomy and Terminology of Computer Networking area.</li><li>5. Experience the Designing and Managing of Communication Protocols while getting a good exposure to the TCP/IP Protocol Suite.</li><li>6. Let Familiar with Mechanisms and Protocols for Reliable Data Communications in Various Computer Network Architectures.</li><li>7. Learn about the Protocols HTTP and FTP and Protocol Designs.</li></ol>
26.	18UITC5Q	Core Course – XII: Dot Net Programming Lab	<ol style="list-style-type: none"><li>1. Understand .NET Framework and describing some of the Major Enhancements to the new version of Visual Basic.</li><li>2. Basic Structure of Visual Basic.NET Features of the Integrated Development Environment (IDE).</li></ol>



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			3. Develop a Working Knowledge of C# Programming Constructs and the .NET Framework. 4. Build and Debugging Well-Formed Web Forms with ASP.NET Controls. 5. Develop of Design Distributed Data-Driven Applications using the .NET Framework, C# and ADO.NET. 6. Create Web-Based distributed Applications using C#, ASP.NET and ADO.NET.
27.	18UIT051	Major Elective Course – II: Software Engineering	1. Create an ability to design and conduct experiments, as well as to analyze and interpret data. 2. Learn different stages in Software Development. 3. Give an ability to design a System, Component, or Process to meet desired needs within realistic constraints. 4. Acquire the skills of software life cycle models. 5. Provide an ability to identify, formulate, and solve engineering problems. 6. Educate the techniques on Software Testing. 7. Give the knowledge of Software Maintenance.
28.	18UIT052	Major Elective Course – II: Neural Networks	1.Create ability to Design and Conduct Experiments, as well as to Analyze and Interpret Data. 2.Learn different Stages in Software Development. 3.Give an ability to Design a System, Component, or Process to meet desired needs with in Realistic Constraints. 4. Introduce an ability to function on Multi-disciplinary Teams. 5. Provide ability to Identify, Formulate, and solve Engineering



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			Problems. 6. Understand the basic Signal Processing.
29.	18UITO53	Major Elective Course – II: Cloud Computing	1. Understand Infrastructure and Operations. 2. Identify the Cloud-Computing-Related IT Services. 3. Gain the knowledge about Identified Cloud Services. 4. Map the applications and Workloads to the Associated Cloud Services. 5. Protect the Information Resources from Supply Chain Threats. 6. Secure the Assurances Associated with the Hardware and Software used. 7. Learn the different Services offered by Cloud.
30.	18UITS5P	Skill Based Course – II: Soft Skill Training	1. Understand the Interpersonal Skills. 2. Enhance Holistic Development of Students and improve their Employability Skills. 3. Develop Inter Personal Skills to be an Effective Goal Oriented Team Player. 4. Develop Effective Communication Skills and Presentation Skills.
31.	18UITS51	Skill Based Course – III: Biometrics and Information Security	1. Understand the basics of Biometric and its Policy. 2. Know Biometric Technologies through Interaction with Finger Biometric. 3. Understand the impact of Biometric Authentication like Face 4. Understand the concepts like Voice and Iris Biometrics. 5. Know Message Authentication and Hash Functions.



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			6. Introduce various techniques for Information Security.
<b>SEMESTER – VI</b>			
32.	18UITC61	Core Course – XIII: Open Source Technology	<ol style="list-style-type: none"> <li>1. Understand the HTML to Create Basic Web Pages.</li> <li>2. Get the Knowledge on PHP Functions.</li> <li>3. Design the Web Pages Using Forms in PHP.</li> <li>4. Learn the Implementation of Various Data Structures in PERL.</li> <li>5. Learn the PERL Syntax for Variables, Loops and Constructs.</li> <li>6. Learn the Difference between PHP and PERL.</li> </ol>
33.	18UITC6P	Core Course - XIV: Open Source Technology Lab	<ol style="list-style-type: none"> <li>1. Design and Implement Dynamic Websites with Good Aesthetic Sense of Designing and Latest Technologies like PHP and PERL.</li> <li>2. Achieve Good Grounding of Web Application Terminologies and Other Web Services.</li> <li>3. Able to Recognize the Benefits and Features of Open Source Technology.</li> <li>4. Providing Knowledge on Event Handling and Validation in PHP.</li> <li>5. Learn Syntax, Variables, Loops and Constructs in PERL.</li> <li>6. Gain the Knowledge about File Concepts PERL.</li> </ol>
34.	18UITC62	Core Course – XV: Distributed Computing Techniques	<ol style="list-style-type: none"> <li>1. Gain Experience about Various Computing Techniques.</li> <li>2. Understand the Implementation of Security in Mobile Computing.</li> <li>3. Familiarize the Students with Basic Concepts of Grid Computing.</li> </ol>



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			4. Understand the Cryptographic Techniques used in Each Computing Technique. 5. Provide Ability to Understand Architecture like WAP. 6. Know the Power of Distributed Computing in Any Field.
35.	18UITJ61	Core Course – XVI: Project & Viva –Voce	1. Provide a Concrete Description of the Project's Effect at the Outcome Level. 2. Help to Understand a Participatory Process. 3. Provide the Sense to Understand the Target Group and Other Stakeholders. 4. Introduce a Clear and Concise Knowledge on Projects. 5. Simulate a Real Time Application System. 6. Provide Ideas on SRS Preparations.
36.	18UITO61	Major Elective Course – III: Data Mining and Data Warehousing	1. Introduce the Basic Concepts of Data Warehouse and Data Mining Techniques. 2. Getting Knowledge on OLAP Operations. 3. Discover Interesting Patterns and Analyse Supervised and Unsupervised Models and Estimate the Accuracy of the Algorithms. 4. Process Raw Data to make it Suitable for Various Data Mining Algorithms. 5. Apply the Techniques of Clustering, Classification, Association Finding, Feature Selection and Visualization to Real World Data. 6. Understand the Web Mining.
37.	18UITO63	Major Elective Course – III:	1. Understand about how the Hardware and Software are





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		Client/Server Computing	combined to Implement Client/Server Computing. 2. Implement the Current Client/Server Standards. 3. Learn the Basic Client/Server Models. 4. Know about the Concepts of a Typical Client Operating System. 5. Understand the Difference between Client and Server Hardware Technology. 6. Define the role of Backup & Recovery Mechanisms.
38.	18UITO62	Major Elective Course – III: Embedded Systems	1. Understand the basics of embedded system, processor architecture. 2. Know network devices and communication buses, device drivers. 3. Know about applying programming concept to embedded devices using C and C++. 4. Understand the processes, threads and inter process communications. 5. Enrich real time operating system and its services, process management. 6. Give knowledge on Processor and Memory organization. 7. Explain real word interfacing techniques.
39.	18UITS61	Skill Based Course –IV: Internet of Things	1. Gain about IoT in terms of a suggested IoT Conceptual Framework. 2. Understand of designing the Affordability of IoT Devices. 3. Learn about the Functions of IP address, MAC address, DNS and DHCP.



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			4. Know about Security Model, Security Profiles and Security Protocols for IoT. 5. Learn about Cloud Platform.
40.	18UITV6P	Value Based Course – II: Mobile Application Development Lab	1. Gain experience on Android Platform. 2. Understand Importance of Android Apps. 3. Familiarize the students with basic tools of Eclipse IDE. 4. Understand the need of Android Apps in Mobile Application Development.