## **DEPARTMENT OF INFORMATION TECHNOLOGY**

## **Program Specific Outcome**

- Apply the knowledge of mathematics, science and computing in the core information technologies.
- Identify, design, and analyze complex computer systems and implement and interpret the results from those systems.
- Design, implement and evaluate a computer-based system, or process component, to meet the desired needs within the realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- Review literature and indulge in research using research based knowledge and methods to design new experiments, analyze, and interpret data to draw valid conclusions.
- Select and apply current techniques, skills, and tools necessary for computing practice and integrate IT-based solutions into the user environment effectively.
- Apply contextual knowledge to assess professional, legal, health, social and cultural issues during profession practice.
- Analyze the local and global impact of computing on individuals, organizations, and society.
- Apply ethical principles and responsibilities during professional practice.
- Function effectively as a team member or a leader to accomplish a common goal in a multidisciplinary team.
- Communicate effectively with a range of audiences using a range of modalities including written, oral and graphical.
- Apply the knowledge of engineering and management principles to manage projects effectively in diverse environments as a member or a leader in the team.
- Engage in independent and life-long learning for continued professional development.

## **Course outcome of Information Technology Department**

Class	Course	Outcome
F.Y.B.Sc.	IT 101 Web Design	<ol> <li>Study the computer network system and types of network.</li> <li>Understand the concept of web process, web design,</li> </ol>
		web design pyramid.
		3. Understand the site type, structure and web page catagorisation.
		4. Undertand the HTML, advantage disadvantage of HTML and HTML tags.
	IT 102 OOP in CPP	1. Study the procedure oriented language.
		2. Study the object oriented methodology and C programming.
		3.Understand the basic concept of OOPS.
		4. Basics of C++ and data typing.
	IT- 201 Advanced Web Design	1. Understand to control looping statement.
		<ul><li>2. Understand the Javascript function and objectives.</li><li>3. understand the difference between XML and HTML.</li></ul>
	IT 202 D	
	IT 202: Programming in C++	<ol> <li>Understand the pure virtual function and static function.</li> <li>Study the programm development using inheritance.</li> </ol>
		3. Understand the funcations of template.
S.Y.B.Sc.	IT 211 : Data Structure – I	1. understand the Data Structure & Algorithm Notations
		2. Study the Algorithm analysis for Time and Space Requirement
		3. Understand the concept of stack and Multiple stacks.
	IT-221: Data Structure – II	1. Understand the concept of Tree.
		2. Operations on Binary Tree and BST.
		<ul><li>3. Understand the concept of sorting technique.</li><li>4. Study the Algorithm Design Techniques</li></ul>

IT-212:Programming in C#	1. Study the work by using c# code and ASP.Net create dynamic web pages.	
		2. Use MS Visual Studio.NET IDE and Create Console Applications.
		3. Understand Basic Principal of OOP, Defining Class and using functions.
		4. Understand the use of constructor and destructor.
		5. Use Polymorphism ,Method Overriding ,Method hiding.
	IT 222 : Web Programming using ASP.NET	<ol> <li>Understand the use of ASP.Net create ASP.Net Compilation Model, Code Behind Model Execution Stages.</li> <li>Study about ASP.NET Controls, ASP.Net Intrinsic Objects</li> <li>Learn the use of page layout, styles and text balance, site map, Master pages and content Pages,</li> </ol>
		Navigation controls: Tree view, site map path(bread crumb), Menu navigation.
T.Y.B.Sc.	IT 311 Database Management Systems	1. Get insight into the system softwares and their tools like Editors and Deb Monitors.
		<ol> <li>Get familiar with language processing activities.</li> <li>Understand detail working of Assembler, Macro and Macro Preprocessor, Compiler and linker &amp; Loader.</li> </ol>
	IT-312 Database Management System	1. Get aware of Describing & storing data.
		<ul><li>2. Know about E-R Model by overview of database design</li><li>3. Get familiar with Conversion of ER to Relational</li></ul>
		Model.  4. Know about functional dependency and Data Normalization.  5. Understand Database Implementations.
		6. Make use of Concurrency control, Backup & recovery for large or he of databases.
		7. Get aware about handling he databases.
	IT-313 Data Communication	Know about Major Communication in data communication system -Transmission Path and

		Modems.
		2. Get familiar with Switching & Multiplexing.
		3. Understand Error Correction & Detection in Data Communication.
		4. Know about Wired LANs , Wireless LANs and Bluetooth.
		5. Get knowledge of Data Communication Services.
	IT-315 Internet Programming using PHP	1. Understand how PHP works with lexical structure of it.
		2. program for different applications using arrays, functions and strings.
		<ul><li>3. Aware about different web techniques used in PHP.</li><li>4. Integrate PHP with MYSQL.</li></ul>
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	IT-316 JAVA Programming-I	1. Get knowledge JDK Environment.
		2. Explore polymorphism using Function and Operator Overloading, overriding.
		3. Understand the different aspects of hierarchy of classes and their extensibility.
		4. Understand the concepts of streams and files.
		5. Write programs for handling runtime errors using exception.
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	IT-321 Operating System	1. Know about functions and services of operating system.
		2. aware about different CPU scheduling algorithms
		3. Get familiar with different memory management techniques.
		4. Understand different disk and drum scheduling algorithms as well as deadlock concepts.
	IT-322 MS SQL Server	1. Understand features and data types in SQL server.
	11-322 MS SQL Server	2. Create and manipulate databases for various applications.
		3. Use procedures and trigger for performing complex operation on databases.
		4. Understand to Handle errors using exception handling concepts.

	IT-323 Computer Network & Security	1. Understand applications of network, network structures and protocol hierarchy
		2. Aware about details of physical, datalink, network and transport layer of TCP/IP network model.
		3. Understand about different aspects of network security like firewalls, IP security and VPNs.
		4. Aware about attacks and Confidentiality used in crypotgraphy.
	IT-324 Automata Theory, Languages, and Computation	1. Understand what is Push down Automata and its applications.
	•	2. Understand concepts of Context free grammar and normalization of CFG.
		3. Convert regular expression to Finite Automata.
		4. Design Turing Machines for various applications like enumerator, function computer and universal turing machine.
	IT-325 Cyber Law & IT Act	1. Understand about basics of cybernetics.
		2. Understand theory of cyber crime like web jacking and hacking.
		3. Understand about cyber laws and IT acts 2000 in India.
		4. Understand about intellectual property rights.
	IT-326 JAVA Programming-II	1. Program using graphical user interface with Swing classes.
		2. Handle different kinds of events generated while handling windows.
		3. create programs using menus and dialog boxes.
		4. Program for websites using applets.
		5. understand advanced java concepts like JDBC and servlets.