## **Course Outcomes**

## **Course Objectives and outcomes**

<b>Course Code</b>	Course name	Objectives	Outcomes
1-1-106R20	Information Technology	<ol> <li>Students will try to learn:         <ol> <li>About essential computer hardware components.</li> <li>Functions and importance of Operating Systems and different types of Operating Systems.</li> <li>In crafting professional word documents, excel spread sheets, power point presentations using the Microsoft suite of office tools</li> </ol> </li> </ol>	<ol> <li>Students will be able to:         <ol> <li>Describe the essential computer parts and their importance.</li> <li>Distinguish different types of Operating systems and their roles.</li> <li>Apply the features of word processor, spreadsheet and presentation software.</li> </ol> </li> </ol>
1-2-106R20	E-Commerce and Web Designing	<ol> <li>Students will try to learn:         <ol> <li>Understand concept of E-commerce and its types.</li> <li>Be familiarized with technologies for E-commerce.</li> <li>Understand different types of network threats and securities of E-commerce applications.</li> <li>To describe a sound introduction to Web Terminologies.</li> <li>To give a good foundation of components required to design web sites and principles behind the dynamic web pages.</li> </ol> </li> </ol>	<ol> <li>Students will be able to:         <ol> <li>Define and differentiate various types of E-Commerce.</li> <li>Describes the technologies for E-Commerce.</li> <li>Explains about threats and measures for security.</li> <li>Understand different types of networks and web terminologies.</li> <li>Understand and use HTML tags to design web pages and also Identify components required to design dynamic web pages and use them.</li> </ol> </li> </ol>
1-3-106R20	Programming with C and C++	<ol> <li>Students will try to learn:         <ol> <li>To understand features and importance of programming languages.</li> <li>To understand different types of control statements.</li> </ol> </li> </ol>	<ol> <li>Students will be able to:         <ol> <li>Describe the characteristics of different types of programming languages.</li> <li>Explain about the features of C language and different types of statements used in C.</li> </ol> </li> </ol>

		<ol> <li>To study the implementation of modular programming and other components of C language.</li> <li>The characteristics of an Object Oriented Programming Language.</li> <li>The basic principles of Object oriented Design in C++ and enhance problem solving and programming skills in C++.</li> <li>About constructors, inheritance etc.,</li> </ol>	<ol> <li>Identifies the advantages and implementation of modular programming.</li> <li>Use the characteristics of an Object Oriented programming language.</li> <li>Understand the relative merits of C++ as an Object Oriented programming language.</li> <li>Develop programs with features of C++ programming language.</li> </ol>
		Students will try to learn:	Students will be able to:
1-4-106(B)R20	Database Management System	<ol> <li>To describe a sound introduction to DBMS.</li> <li>To give a good foundation of relational data model.</li> <li>To demonstrate the principles behind systematic database design approaches by covering conceptual design, logical design through normalization.</li> <li>To introduce the concepts of basic SQL, a database language and PL/SQL.</li> </ol>	<ol> <li>Explain the features of database management systems and relational database.</li> <li>Design conceptual models of a database using ER modeling for real life applications.</li> <li>Create and populate a RDBMS for a real life application, with constraints and keys using SQL.</li> <li>Retrieve any type of information from a database by formulating complex queries in SQL.</li> </ol>
1-4-106(A)R20	Object Oriented Programming with JAVA	<ol> <li>Students will try to learn:         <ol> <li>To understand basic architecture of java and its features.</li> <li>To understand the concept of string class and various methods to manipulate strings.</li> <li>To understand inheritance concepts for reusing the program</li> <li>To understand different types of errors/Exceptions and how they can be handled.</li> <li>To learn how to write application containing multiple tasks that can be executed simultaneously.</li> </ol> </li> </ol>	<ol> <li>Students will be able to:         <ol> <li>To apply OOP features and concepts for solving given problem.</li> <li>To implement OOP concepts in java</li> <li>Demonstrate the behavior of programs involving the basic programming constructs like control structures, constructors, string handling .</li> <li>Illustrate inheritance concepts for reusing the program.</li> <li>Demonstrate the user defined exceptions by exception handling.</li> </ol> </li> </ol>

		Students will be able to:	
1-5-106(A) R20	Big Data Analytics using R	<ol> <li>Students will try to learn:         <ol> <li>To understand data and classification of digital data</li> <li>To understand big data analytics</li> <li>To load data into R</li> <li>To organize data in the form of R objects and manipulate them as needed</li> </ol> </li> </ol>	<ol> <li>To distinguish and identify different types of data</li> <li>To understand and uses the concepts big data analytics</li> <li>To understand and demonstrate the R language constructs</li> <li>To design programs to handle data processing using R</li> </ol>
1-5-106(B) R20	Data Science using Python	<ol> <li>Students will try to learn:         <ol> <li>To understand basic concepts of data science</li> <li>To understand how python is useful for problem solving</li> <li>To use standard programming constructs of python</li> <li>To use and implement concepts like constructs for aggregated data, functions, modules</li> <li>To understand the implement the basic oop concepts in python</li> </ol> </li> </ol>	<ol> <li>Students will be able to:         <ol> <li>To explain the concepts of data science</li> <li>To design python using standard programming constructs</li> <li>To demonstrate the use of constructs for aggregated data, functions, modules</li> <li>To use the oops concepts of python in problem solving</li> </ol> </li> </ol>