B.VOC Software Development

PROGRAMME SPECIFIC OUTCOME

PSO1: Create a foundation graduate which will act as a feeder course for higher studies in the area of Software development.

PSO2: Achieve fundamental knowledge in mathematical foundations and basic numerical skills.

PSO3: Attain the in-depth knowledge in environmental science, life skill development, human resource management, and entrepreneurship.

PSO4: Understand the concepts of operating system, computer architecture, networks, database administration, software engineering and web application designing.

PSO5: Understand the advanced programming languages such as J2EE, Android, .Net and learn the development of software and web applications using these.

PSO6: Apply and verify theoretical concepts through laboratory experiments and practical classes.

PSO7: They will learn about professional ethics and legal aspects of software development in for their future in IT Industries and achieve hands on experience in software development through industrial orientation.

COURSE OUTCOME

SJSDC1IT01: FUNDAMENTALS OF COMPUTER & PROGRAMMING IN C

SJSDC1IT01.1	Student will be able to understand the basic Fundamentals of Computers, its application, parts and types of Computers, CPU functions and interconnections, memory hierarchy, and input/output operation.
SJSDC1IT01.2	Students will be able to learn the problem solving by using basic C program structure, tokens, input output operations.
SJSDC1IT01.3	Student will be able to understand the concepts of decision making and looping, branching, string handling functions.
SJSDC1IT01.4	Student will be able to understand the concepts of Different types of Arrays and Use of Different Types of function such as User Defined and Build in Functions Available in C language.
SJSDC1IT01.5	Student will be able to understand the concepts of Structures and union in C Language and will be able to understand as well as implement the concept of File Handling in C Language.

SJSDC1IT02: INTERNET PROGRAMMING

SJSDC1IT02.1	Understand the basic concepts of WWW, web servers, protocols.
SJSDC1IT02.2	Understand the basic concepts of WWW, web servers, protocols.
SJSDC1IT02.3	Learn how to create websites using CSS, Javascript, JQuery.
SJSDC1IT02.4	Implement interactive web page(s) using dreamweave.
SJSDC1IT02.5	Design a responsive web site using Flash, image editing using photoshop.

SJSDC1IT03 (P): PROGRAMMING IN C - LAB

SJSDC1IT03.1	Student will be able to understand the basic Fundamentals of Computers, its application, parts and types of Computers, CPU functions and interconnections, memory hierarchy, and input/output operation.
SJSDC1IT03.2	Students will be able to learn the problem solving by using basic C program structure, tokens, input output operations.
SJSDC1IT03.3	Student will be able to understand the concepts of decision making and looping, branching, string handling functions.
SJSDC1IT03.4	Student will be able to understand the concepts of Different types of Arrays and Use of Different Types of function Such as User Defined and Build in Functions Available in C language.
SJSDC1IT03.5	Student will be able to understand the concepts of Structures and union in C Language and will be able to understand as well as implement the concept of File Handling in C Language.

SJSDC1IT04 (P): INTERNET PROGRAMMING - LAB

SJSDC1IT04.1	Understand the basic concepts of WWW, web servers, protocols.

SJSDC1IT04.2	Implement interactive web page(s) using HTML, CSS, design a responsive web site using HTML5.
SJSDC1IT04.3	Learn how to create websites using CSS, Javascript, JQuery
SJSDC1IT04.4	Implement interactive web page(s) using dreamweaver.
SJSDC1IT04.5	Design a responsive web site using Flash, image editing using photoshop.

SJSDC2IT05: DATA STRUCTURES

SJSDC2IT05.1	Be able to design and analyse the time and space efficiency of the data structure.
SJSDC2IT05.2	Be capable to identity the appropriate data structure for given problem.
SJSDC2IT05.3	Have practical knowledge on the applications of data structures.
SJSDC2IT05.4	Understand the concept of Dynamic memory management, data types, algorithms, Big O notation.
SJSDC2IT05.5	Understand basic data structures such as arrays, linked lists, stacks and queues.

SJSDC2IT06: PROGRAMMING IN JAVA

SJSDC2IT06.1	Implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.
SJSDC2IT06.2	Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem.
SJSDC2IT06.3	Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.
SJSDC2IT06.4	Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.
SJSDC2IT06.5	Identify and describe common abstract user interface components to design GUI in Java using Applet & AWT along with response to events.

SJSDC2IT07 (P): DATA STRUCTURES THROUGH JAVA LAB

SJSDC2IT07.1	Understand basic data structures such as arrays, linked lists, stacks and queues.
SJSDC2IT07.2	Describe the hash function and concepts of collision and its resolution methods.
SJSDC2IT07.3	Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.
SJSDC2IT07.4	Identify and describe common abstract user interface components to design GUI in Java using Applet & AWT along with response to events.
SJSDC2IT07.5	Identify, Design & develop complex Graphical user interfaces using principal Java Swing classes.

SJSDC2IT08 (Pr): MINI PROJECT

| SJSDC2IT08.1 | Objective of Project work is to gain industrial knowledge on the implementation of the various software development concepts. |

SJSDC2IT08.2	Each and Every student will have assign individually one Project Work and they have made them by using the software tools/ languages that they have learned.
SJSDC2IT08.3	Able to gain practical knowledge and implement all learning concepts in form of application.
SJSDC2IT08.4	Also Able to make and design User interface for their Applications which includes forms, all types of buttons, database etc. Able to access data from file.
SJSDC2IT08.5	Perform real life functions like take input from user ,perform operation on data accordingly and provide require output to the user.

SJSDC3IT09: BASIC NETWORKING CONCEPTS

SJSDC3IT09.1	Understand basics of computer networks, Topologies and Transmission modes.
SJSDC3IT09.2	Understand functions of each layer in OSI and TCP/IP model.
SJSDC3IT09.3	Explain the functions of datalink layer paradigms and Protocols.
SJSDC3IT09.4	Describe the transport layer and its services.
SJSDC3IT09.5	Classify the routing protocols and analyse how to assign the IP addresses for the given network.

SJSDC3IT10: INTRODUCTION TO RDBMS AND SQL

SJSDC3IT10.1	Understand, appreciate and effectively explain the underlying concepts of database technologies.
SJSDC3IT10.2	Design and implement a database schema for a given problem-domain.
SJSDC3IT10.3	Populate and query a database using SQL DML/DDL commands.
SJSDC3IT10.4	Programming PL/SQL including stored procedures, stored functions, cursors, packages.
SJSDC3IT10.5	Declare and enforce integrity constraints on a database using RDBMS.

SJSDC3IT11 (P): NETWORKING - LAB

SJSDC3IT11.1	Understand basics of computer networks, Topologies and Transmission modes.
SJSDC3IT11.2	Understand functions of each layer in OSI and TCP/IP model.
SJSDC3IT11.3	Explain the functions of datalink layer paradigms and Protocols.
SJSDC3IT11.4	Describe the transport layer and its services.
SJSDC3IT11.5	Classify the routing protocols and analyse how to assign the IP addresses for the given network.

SJSDC3IT12 (P): DATABASE - LAB

SJSDC3IT12.1	Understand, appreciate and effectively explain the underlying concepts of database technologies.
SJSDC3IT12.2	Design and implement a database schema for a given problem-domain.
SJSDC3IT12.3	Programming PL/SQL including stored procedures, stored functions, cursors, packages.
SJSDC3IT12.4	Populate and query a database using SQL DML/DDL commands.
SJSDC3IT12.5	Declare and enforce integrity constraints on a database using RDBMS

SJSDC5IT17: .NET AND DATABASE ADMINISTRATION

SJSDC5IT17.1	Familiarize with the basic concepts of .NET Programming and how to implement and work with concepts.
SJSDC5IT17.2	Able to understands use of data types, and also learn to stop abnormal terminations via using exception handling.
SJSDC5IT17.3	Able to learn Object Oriented Concepts and implement them in a programming way.
SJSDC5IT17.4	Able to make and design User interface for their Applications which includes forms, all types of buttons etc.

SJSDC5IT18(E1): PYTHON PROGRAMMING AND MOBILE WEB

SJSDC5IT18(E1).1	Learn Python programming Environment and basic design constructs.
SJSDC5IT18(E1).2	Understand the decision and repetition structures in program design.
SJSDC5IT18(E1).3	Apply functions and files to improve the efficiency of the programs.
SJSDC5IT18(E1).4	Implement exception handling and Object oriented programming methodology.
SJSDC5IT18(E1).5	Represent and visualize data.
SJSDC5IT18(E1).6	Implement object oriented concepts, Implement database and GUI applications.

SJSDC5IT18(E2): J2EE

SJSDC5IT18(E2).1	Implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.
SJSDC5IT18(E2).2	Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem
SJSDC5IT18(E2).3	Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.
SJSDC5IT18(E2).4	Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development
SJSDC5IT18(E2).5	Identify and describe common abstract user interface components to design GUI in Java using Applet & AWT along with response to events
SJSDC5IT18(E2).6	Identify, Design & develop complex Graphical user interfaces using principal Java Swing classes
SJSDC5IT18(E2).7	Understand and apply object oriented principles.

SJSDC5IT19(E3): MOBILE SOFTWARE DEVELOPMENT USING

SJSDC5IT19(E3).1	Describe Android platform, Architecture and features
SJSDC5IT19(E3).2	Design User Interface and develop activity for Android App.

SJSDC5IT19(E3).3	Use Intent, Broadcast receivers and Internet services in Android App.
SJSDC5IT19(E3).4	Design and implement Database Application and Content providers.
SJSDC5IT19(E3).5	Use multimedia, camera and Location based services in Android App.
SJSDC5IT19(E3).6	Discuss various security issues in Android platform
SJSDC5IT19(E3).7	Demonstrate their ability to deploy software to mobile devices
SJSDC5IT19(E3).8	Demonstrate their ability to debug programs running on mobile devices

SJSDC5IT19(E4): PROGRAMMING MOBILE APPLICATION

SJSDC5IT19(E4).1	Describe Android platform, Architecture and features
SJSDC5IT19(E4).2	Design User Interface and develop activity for Android App.
SJSDC5IT19(E4).3	Use Intent, Broadcast receivers and Internet services in Android App.
SJSDC5IT19(E4).4	Design and implement Database Application and Content providers.
SJSDC5IT19(E4).5	Use multimedia, camera and Location based services in Android App.
SJSDC5IT19(E4).6	Discuss various security issues in Android platform
SJSDC5IT19(E4).7	Demonstrate their ability to deploy software to mobile devices
SJSDC5IT19(E4).8	Demonstrate their ability to debug programs running on mobile devices

SJSDC5IT20(P): .NET AND DATABASE - LAB

SJSDC5IT20.1	Familiarize with the basic concepts of client server concepts and .NET Programming and how to implement and work with concepts.
SJSDC5IT20.2	Able to understands use of data types, and also learn to stop abnormal terminations via using exception handling. Apply deligates event and exception handling to incoperate with ASP.Net
SJSDC5IT20.3	Able to learn Object Oriented Concepts and implement them in a programming way. Analyse the use of .Net components depend on the problem statement
SJSDC5IT20.4	Able to make and design User interface for their Applications which includes forms, all types of buttons etc.

SJSDC5IT21(P): ANDROID AND PYTHON PROGRAMMING - LAB

SJSDC5IT21.1   Programs for Modules, Input-Output, Exception Handling, OOPs concept Programs WAMP/XAMPP Server, MySQL db, and Python MySQL interface Exchange of data between web page and server

SJSDC5IT21.2   Design User Interface and develop activity for Android App.

SJSDC5IT21.3   Use Intent, Broadcast receivers and Internet services in Android App.

SJSDC5IT21.4   Design and implement Database Application and Content providers.

SJSDC5IT21.5   Use multimedia, camera and Location based services in Android App.

SJSDC5IT21.6   Discuss various security issues in Android platform

SJSDC5IT21.7   Demonstrate their ability to deploy software to mobile devices

SJSDC5IT21.8   Demonstrate their ability to debug programs running on mobile devices

SJSDC6IT22(Pr): INTERNSHIP & PROJECT

SJSDC6IT22.1   To learn about requirement collection

SJSDC6IT22.2   To analyze the collected data

SJSDC6IT22.3   Database design and user inter face design

SJSDC6IT22.4   Testing and deployment