DEPARTMENT OF B. VOC

Programme Specific Outcomes (PSOs) –Software Development

PSO1	Understand analyze and develop computer programs in the areas related to web design, mobile application design.
PSO2	Apply standard software engineering process and strategies in software project development using open source programming environment to deliver a quality product for business success.
PSO3	Acquaintance with latest trends in software development and thereby innovate new ideas in the area of software development.
PSO4	Conceptual grounding in computer usage as well as its practical business applications.
PSO5	To demonstrate advanced skills in the effective analysis design and realization of business system utilizing contemporary information technology.

Course Outcomes

SEMESTER	COURSE CODE	COURSE NAME	COURSE OUTCOMES
I	GEC1DM03	Discrete Mathematics	• CO1: Equip the students with basic principles of Discrete Mathematics. • CO2: Learn the mathematical logic & Boolean Algebra • CO3: Learn the basics of Groups & Rings
	SDC1IT01	Fundamentals of Computer & Programming in C	• CO1: Knowledge and Understanding: On successful completion of this subject the students have the programming ability in C Language. • CO2: Intellectual Cognitive/ Analytical Skills: Enhancing Logical Thinking and Reasoning Skills through Collaborative Learning in C Programming. • CO3: Practical Skills: Students would be capable of developing various applications to solve deluge of real world problems. They can also learn to make system software as well as application software. These existing languages

			could become base for developing new languages which can inherent its features. On the backend of various embedded systems, these languages are deployed. • CO4: Transferable Skills: In many multinational companies they can work effectively in a group or team to achieve goals and can show initiative and leadership abilities.
	SDC1IT02	Internet Programming	• CO1: Get an exposure to develop and design simple web applications Create interactive web applications having images and animations • CO2: Knowledge and Understanding: Students will a) know how to define internet, www, various protocols, b) understand the working of internet c) create email id and use it for sending online mails and attachments d) Students will understand and be able to describe the differences between internet and intranet. • CO3: Intellectual(Cognitive/ Analytical) Skills: Students will be able to a) identify which medium and topology should be used for networking b) They will be able to judge which connection should they use for getting an internet at home or work. c) Browsing at high sped using keywords • CO4: Practical Skills Students will learn to: a) Able to create HTML based web pages b) Dynamicity to web page using JavaScript. c) Create email ids Surf net using shortcuts. • CO5: Transferable Skills : Students will be able to a) Create projects and earn money by selling them
	SDC1IT03 (P)	Programming in C - Lab	• CO1: Understand and practice the computer programming.

			• CO2:Solve mathematical or scientific problems using C.
	SDC1IT04 (P)	Internet Programming -Lab	• CO1: Understand and Practice web development • CO2:Get hands on interactive web, JavaScript and CSS • CO3: Develop and design web application having images and animations
II	GEC2NM06	Basic Numeric Skills	• CO1: Solve problems linear equations, metrics and progressions. • CO2:Solve statistical problems and analyze data.
	SDC2IT05	Data Structures	• CO1: Get an idea of various data structure and their implementations. • CO2: Knowledge and Understanding: a) Define basic static and dynamic data structures and relevant standard algorithms for them: stack, queue, dynamically linked lists, trees, graphs, heap, priority queue, hash tables, sorting algorithms. b) 2.Demonstrate advantages and disadvantages of specific algorithms and data structures, c) 3.Select basic data structures and algorithms for autonomous realization of simple programs or program parts d) 4.Determine and demonstrate bugs in program, recognize needed basic operations with data structures e) 5.Formulate new solutions for programming problems or improve existing code using learned algorithms and data structures, f) 6. Evaluate algorithms and data structures in terms of time and memory complexity of basic operations. • CO3: Intellectual Skills: a) Ability to define the computer science problems. b) Ability to drive different solution alternatives for the computer science problems.

			c) Ability to analyze the solution alternatives and choose the optimum one. • CO4: Practical Skills: Design, build and develop programs of varying levels of complexity. • CO5: Transferable Skills: Knowledge of the concepts and material presented in this course will provide the students with the capability to: a) Use data structures effectively to solve practical problems. b) Write and present effective computer programs that employ efficient algorithms. 3. Work in stressful environment and within constraints. c) 4. Search for information and adopt life-long self-learning.
	SDC2IT06	Programming in Java	• CO1: Learn the OOPS Concept and use object oriented approach for solving real life problems • CO2: Develop GUI based applications using java
	SDC2IT07 (P)	Data Structures through Java - Lab	• CO1: Implement various data structures and to solve real life problems using data structures. • CO2: Expertise in java programming
	SDC2IT08 (Pr)	Mini Project	• CO1: Develop software development skills • CO2:Provide a solution for a real life situation. • CO3: Get a chance to utilize and implement the skill acquired.
III	SDC3IT09	Basic Networking Concepts	• CO1: Understand the basics of data communication and exchange • CO2:Understand various techniques and rules for device communication
	SDC3IT10	Introduction to RDBMS and SQL	• CO1: Understand the need and working of Data Base and Data Base Management Systems. • CO2:Learn the basic principles of database models and database design. • CO3: Learn the basic of RDBMS and data manipulation using SQL.

	SDC3IT11(P)	Networking - Lab	• CO1: Learn the basics of network administration Set up and configure LAN and DNS server.
	SDC3IT12(P)	Database - Lab	• CO1:Learn data base administration • CO2: Expertise SQL programming
IV	GEC4SE11	Software Engineering Principles	• CO1: Learn engineering practices in Software development • CO2: Learn various software development methodologies and practices. • CO3: Learn various Evaluation methods in Software Development
	GEC4ED12	Entrepreneurship Development	• CO1: Familiarize the students with the concept of entrepreneurship • CO2: Identify and develop the entrepreneurial talents of students • CO3: Generate innovative business ideas in emerging industrial scenario
	SDC4IT13	Operating Systems	• CO1: Learn the basic concepts and functions of operating system Understand processes and its life cycle. • CO2: Learn and understand various Memory and Scheduling Algorithms. • CO3: Gain an overall idea about the latest developments in Operating Systems
	SDC4IT14	Advanced Computer Networks	• CO1: Get an outline on TCP/IP networks and its protocols. • CO2: Learn about wireless, mobile network and associated technologies
	SDC4IT15(P)	Networking & OS - Lab	• CO1: Learn to set up intranet Services, wireless networks and web servers • CO2: Get a basic idea of router configuration and LAN interconnections Learn socket programming.

			• Learn Linux administration and shell scripting.
	SDC4IT16 (Pr)	Project	• CO1: Implement the theoretical knowledge gained from various areas to develop effective solutions to various real life computing problems • CO2: understanding and solving problems in the field of computing.
V	GEC5HR13	Human Resource Management	• CO1: To familiarize the students with the different aspects of managing Human Resource in the Organization • CO2: To equip the students with appropriate knowledge and skills required for acquisition, development and retention of Human Resources
	SDC5IT17	.Net and Database Administration	• CO1: Learn the basic of .NET technology Expertise web development.
	SDC5IT18 (E1/E2)	J2EE Programming and Mobile Web	• CO1: Learn distributed enterprise applications using java. • CO2:Learn web development and server side programming using java Learn database managements and spring frameworks.
	SDC5IT19 (E3/E4)	Mobile Software Development using Android	• CO1: Develop mobile applications with Google Android Platform • CO2: Learn more about mobile operating system • CO3:Get an insight to cross-platform mobile app development
	SDC5IT20(P)	.Net and Database - Lab	• CO1: Develop applications with C#.Net and ASP.Net • CO2: Develop mobile web and applications that runs on multiple platforms.
	SDC5IT21(P)	Android - Lab	• CO1: Practice and implement the theoretical knowledge acquired in the selected elective course. • CO2: Develop industry standard applications with real life implications.

VI	SDC6IT22 (Pr)	Internship & Project	• CO1: Utilize the theoretical knowledge and practical experiences to solve a real life problem with high standard and accuracy • CO2: Get feel of organizational atmosphere and their practices • CO3: Induce confidence to manage large engineering project and make work ready