RAGHU ENGINEERING COLLEGE

(Autonomous)
(Approved by AICTE, Affiliated to JNTU Kakinada)
(Accredited by NBA (CIVIL, EEE, MECH, ECE, CSE & NAAC 'A' Grade)
Dakamarri, Bheemunipatnam Mandal, Visakhapatnam Dist. – 531 162 (A.P.)
Ph: +91-8922-248001, 248002 Fax: + 91-8922-248011
e-mail: principal@raghuenggcollege.com website: www.raghuenggcollege.com

Department of Computer Science and Engineering

AR20 Regulation I B.Tech Course Outcomes

1-1 Sem	**Subject Name and Code: Calculus (20MA1001)**
CO-1	Test the convergence of an infinite series and express a function in terms of power series.
CO-2	Develop the ability to solve linear differential equations of the first order and use the knowledge gained to certain engineering problems.
CO-3	Develop the ability to solve linear differential equations of higher order and use the knowledge gained to certain engineering problems.
CO-4	Apply techniques of multivariable differential calculus to determine the extreme and series expansions etc. of the functions of several variables.
CO-5	Extend the concept of integration of low and three dimensions and support it through applications in engineering.
1-1 Sem	**Subject Name and Code: Applied Chemistry (20CH1002)**
CO-1	Explain the preparation, properties, and applications of some plastic materials.
CO-2	Categorize the reasons for corrosion and study some methods of corrosion control
CO-3	Understand the importance of materials like nano materials and fullerenes and their uses.
CO-4	Understand the importance of semiconductors and molecular machines
CO-5	Understand the principles of different analytical instruments.
1-1 Sem	**Subject Name and Code: English for Communication (20HS1001)**
CO-1	The lesson helps to explore identifying the specific information from the text.
CO-2	The lesson highlights self-check on communication on general topics, informal discussions, use of cohesive devices for better reading and writing.
CO-3	Students will be able to precise the given texts, infer meanings, and write grammatical sentences.
CO-4	Students will be able to infer meanings of the contexts, recognize nonverbal clues, and use language to interpret graphs.
CO-5	Students will acquire the knowledge of note-taking, present good skills in writing & speaking, writing detailed essays, and editing short texts.
1-1 Sem	**Subject Name and Code: Computer Engineering Workshop (20ES1014)**
CO-1	Apply knowledge for computer assembling and software installation
CO-2	PC Hardware introduces the students to a personal computer and its basic peripherals, the process of assembling a personal computer, installation of system software like MS Windows, Linux, and the required device drivers. In addition hardware and software level troubleshooting processes, tips and tricks would be covered.
CO-3	Apply the tools for the preparation of PPT, Documentation and budget sheet, etc.

CO-4	The productivity tools module would enable the students in crafting professional word documents, excel spreadsheets, and PowerPoint presentations using the Microsoft suite of office tools and LaTeX.
CO-5	Create interactive visual programming using scratch.
1-1 Sem	**Subject Name and Code: Programming for Problem Solving using C (20ES1008)**
CO-1	To write algorithms and to draw flowcharts for solving problems, so as to convert flowcharts/algorithms to C Programs, compile and debug programs
CO-2	To use different operators, and data types and write programs that use two-way/ multi-way selection
CO-3	To decompose a problem into functions and to develop modular reusable code
CO-4	To design and implement programs to analyze the different pointer applications
CO-5	To apply File I/O operations
1-1 Sem	**Subject Name and Code : English Language Communication Skills Lab (20HS1101)**
CO-1	Students will be able to recognize the sounds of English and Phonemic transcription and practice Stress & Intonation in speech.
CO-2	Students neutralize their accents for intelligibility.
CO-3	Students demonstrate speaking skills with clarity and confidence.
CO-4	Students communicate in Oral and Written English forms confidently.
CO-5	Students demonstrate skills like Public Speaking & Oral Presentations.
CO-6	Develop professional work habits and include those necessary for effective collaboration and cooperation with other students in structures and service-learning contact representatives.
1-1 Sem	**Subject Name and Code : Applied Chemistry Lab (20CH1102)**
CO-1	The students entering the professional course have practically very little exposure to lab classes.
CO-2	The experiments introduce volumetric analysis; redox titrations with different indicators; EDTA titrations; then they are exposed to a few instrumental methods of chemical analysis.
CO-3	Thus, at the end of the lab course, the student is exposed to different methods of chemical analysis and the use of some commonly employed instruments.
CO-4	They thus acquire some experimental skills.
1-1 Sem	**Subject Name and Code : Programming for Problem Solving using C Lab (20ES1108)**
CO-1	Gains knowledge on various concepts of a C language.
CO-2	Able to draw flowcharts and write algorithms.
CO-3	Able to design and development of C problem-solving skills.
CO-4	Able to develop modular programming skills and to trace and debug a program.
1-2 Sem	**Subject Name and Code : Numerical techniques and vector spaces (20MA2003)**
CO-1	Determine the numerical solution of the algebraic and transcendental equations.
CO-2	Use interpolation techniques for data analysis and apply numerical methods to problems involving integration and initial value problems.
CO-3	Determine whether or not particular subsets of vector spaces are linearly independent.
CO-4	Interpret a matrix as a linear transformation.
CO-5	Understand inner products and associated norms.
1-2 Sem	**Subject Name and Code : Applied physics (20PH2002)**

CO-1	Apply the basic principles and properties of wave optics to construct and understand the working mechanism of the Interferometer.
CO-2	Identify the conductivity of solids by applying the principles of Quantum Mechanics.
CO-3	Verify the velocity of the EM wave in the isotropic medium by studying its propagation through the dielectric medium.
CO-4	Understand the classification of solids using band gap and gain knowledge on various types of semiconductors and identify a semiconductor using Hall Effect
CO-5	Develop an understanding of the applications of Magnetic materials and dielectric materials.
1-2 Sem	**Subject Name and Code : Linear algebra and Vector Calculus (20MA2002)**
CO-1	Solve the linear system of equations using the concepts of rank, Gauss elimination, Gauss-Jordan, and Gauss-Seidel methods.
CO-2	Solve eigenvalues and eigenvectors of a square matrix.
CO-3	Appraise the Laplace transform technique and use it to solve various engineering problems.
CO-4	Find the gradient and directional derivative of a scalar function and divergence, and curl of a vector function.
CO-5	Apply line, surface, and volume integrals to find work done by a force, flux, and interpret vector integral theorems.
1-2 Sem	**Subject Name and Code : Digital logic design (20ES2006)**
CO-1	An ability to define different number systems and their conversions, binary addition and subtraction, 2'scomplement representation, and operations with this representation.
CO-2	An ability to understand Boolean algebra theorems and apply K-maps for simplification logic functions with Logic gates implementation
CO-3	An ability to understand and design standard combinational circuits along with programmable logic devices
CO-4	An ability to understand latches and flip-flops, Analysis and Synthesis of sequential logic circuits (FSMs)
CO-5	An ability to understand and design different registers and counters.
1-2 Sem	**Subject Name and Code : Data Structures (20ES2005)**
CO-1	Use knowledge of various concepts of a C language & Able to write efficient algorithms.
CO-2	Able to design and development of data structure problems using Stacks/Queues
CO-3	Able to design Linked Lists and their applications
CO-4	Able to develop non-linear data structures-binary trees
CO-5	Able to develop non-linear data structures-graphs
1-2 Sem	**Subject Name and Code : Data Structures Through C Lab (20ES2105)**
CO-1	Able to implement the code for all basic algorithms like searching, sorting, etc
CO-2	Able to write code for linear data structures like stacks, queues, and linked list
CO-3	Able to design and develop non-linear data structures like trees and graphs
1-2 Sem	**Subject Name and Code : Applied Physics Lab (20PH2102)**
CO-1	Apply the working principles of laboratory experiments in optics, mechanics, electromagnetic, and electronics and perform the experiments using the required apparatus.

CO-2	Compute the required parameter by a suitable formula using experimental values (observed values) in mechanics, optics, electromagnetic and electronic experiments.
CO-3	Analyze the experimental results through graphical interpretation.
CO-4	Recognize the required precautions to carry out the experiment and handle the apparatus in the laboratory.
CO-5	Demonstrate the working principles, procedures, and applications.
1-2 Sem	**Subject Name and Code : Digital logic design Lab (20ES2106)**
CO-1	Understand truth tables of logic gates and implement Boolean expressions
CO-2	Design and verify basic combinational logic circuits
CO-3	Construct and implement PLDs
CO-4	Verify various flip-flops and shift registers
CO-5	Design and verify various counters
1-2 Sem	**Subject Name and Code : Universal Human Values (20MC2501)**
CO-1	By the end of the course, students are expected to become more aware of themselves, and their surroundings (family, society, nature)
CO-2	They would become more responsible in life, and in handling problems with sustainable solutions, while keeping human relationships and human nature in mind. They would have the better critical ability.
CO-3	They would have the better critical ability.
CO-4	They would also become sensitive to their commitment toward what they have understood (human values, human relationships, and human society).
CO-5	It is hoped that they would be able to apply what they have learned to their own self in different day-to-day settings in real life, at least a beginning would be made in this direction

Signature of the HOD

Head of the Department
Computer Science & Engineering
Raghu Engineering College
VISAKHAPATNAM-531162

Signature of the Principal

PRINCIPAL
RAGHU ENGINEERING COLLEGE
Dakamarri (V) Bheemunipatnam (M)
Visakhapatnam Dist. - 531 162

RAGHU ENGINEERING COLLEGE

(Autonomous)
(Approved by AICTE, Affiliated to JNTU Kakinada)
(Accredited by NBA (CIVIL, EEE, MECH, ECE, CSE & NAAC 'A' Grade)
Dakamarri, Bheemunipatnam Mandal, Visakhapatnam Dist. – 531 162 (A.P.)
Ph: +91-8922-248001, 248002 Fax: + 91-8922-248011
e-mail: principal@raghuenggcollege.com website: www.raghuenggcollege.com

Department of Computer Science and Engineering

AR20 Regulation II B.Tech Course Outcomes

2-1 Sem	**Subject Name and Code :DISCRETE STRUCTURES(20ES3019)**
CO-1	Write the zeroth order logic and first order logics using different connectives, prepositions and predicates.
CO-2	Study basics of Sets, relations and functions that are needed for computer science disciplinary concepts.
CO-3	Explore different counting techniques.
CO-4	Understand basic graph concepts and classify different types of graphs.
CO-5	Discuss the basic properties of group theory and number theory
2-1 Sem	**Subject Name and Code: SOFTWARE ENGINEERING(20CS3001)**
CO-1	To understand the process of software engineering and SDLC model
CO-2	To understand the process of requirement analysis and preparation on SRS document
CO-3	To understand the different software design processes
CO-4	To understand the implementation and testing approaches in software engineering
CO-5	To understand the different quality management, maintenance and reuse policy
2-1 Sem	**Subject Name and Code: COMPUTER ORGANIZATION (20CS3002)**
CO-1	Understand the architecture of modern computer and understand the arithmetic operations.
CO-2	Understand of different register transfers and instruction types.
CO-3	Develop a detailed understanding of architecture and functionality of central processing unit.
CO-4	Exemplify in a better way the memory organization is communicating with processing unit.
CO-5	UnderstandofI/OdevicescommunicatingwithProcessingUnitandalsoknowingthecharacteristicsofmulti processors
2-1 Sem	**Subject Name and Code: THEORY OF COMPUTATION (20CS3003)**
CO-1	Understand about state machines, languages and computations.
CO-2	Understand the concepts on regular grammars and regular languages.
CO-3	Understand the concepts of context free languages and context free grammars.
CO-4	Learn how to design push down automata for Context Free Languages.
CO-5	Learn how to design a Turing machines
2-1 Sem	**Subject Name and Code: OBJECT ORIENTED PROGRAMMING THROUGH C++(20CS3004)**
CO-1	Understand Basic C++ Programming and Object-Oriented Concepts
CO-2	Build classes and objects in solving Real Time problems.
CO-3	Understand and Apply Inheritance and Polymorphism concepts in Object Oriented Programming.
CO-4	Understand and Use Operator overloading in implementing various programs.

CO-5	Understand Exception Handling and Template Concepts.
2-1 Sem	**Subject Name and Code: SOFTWARE ENGINEERING LAB(20CS3101)**
CO-1	To understand the problem statement and prepare SRS based on it.
CO-2	To design DFD model and prepare structured chart based on DFD
CO-3	To design different UML diagrams
2-1 Sem	**Subject Name and Code: OBJECT ORIENTED PROGRAMMING THROUGH C++ LAB(20CS3104)**
CO-1	Apply an object-oriented approach to programming and identify potential benefits of object-oriented programming over other approaches.
CO-2	Design applications which are easier to debug, maintain and extend.
CO-3	Apply object-oriented concepts in real world applications
2-1 Sem	**Subject Name and Code: FOSS Lab(20CS3108)**
CO-1	Identify and apply various Linux commands.
CO-2	Create a new file from scratch or edit an existing file using vi editor.
CO-3	Develop shell and awk scripts for specific needs
2-1 Sem	**Subject Name and Code: PYTHON PROGRAMMING (Skill Course) (20CS3201)**
CO-1	Write, Test and Debug Python Programs
CO-2	Solve coding tasks related conditional execution
CO-3	Use functions and represent Compound data using Lists
2-1 Sem	**Subject Name and Code: ENVIRONMENTAL STUDIES (20MC2502)**
CO-1	The natural resources and their importance for the sustenance of the life and recognize the need to conserve the natural resources
CO-2	The concepts of the ecosystem a n d its function in the environment. The need for protecting the producers and consumers in various ecosystems and their role in the food web
CO-3	The biodiversity of India and the threats to biodiversity and conservation practices to protect the biodiversity
CO-4	Various attributes of the pollution and their impacts and measures to reduce or control the pollution along with waste management practices
CO-5	Social issues both rural and urban environment and the possible means to combat the challenges
2-2 Sem	**Subject Name and Code: OBJECT ORIENTED PROGRAMMING THROUGH JAVA(20ES4009)**
CO-1	Understand the object oriented programming concepts
CO-2	Create simple applications using classes and objects
CO-3	Develop applications using different types of inheritances
CO-4	Apply parallel processing applications using threads and simple applications using Collections
CO-5	Develop GUI applications using AWT
2-2 Sem	**Subject Name and Code: PROBABILITY AND STATISITCS(20MA4006)**
CO-1	Understand the concepts of descriptive statistics and application of statistical measures.
CO-2	Identify discrete and continuous random variables, apply probability distributions.
CO-3	Understand the concepts of sampling distribution, estimation and construction of confidence intervals.
CO-4	Understand how to apply various statistical tests.
CO-5	Understand how to find nature as well as the amount of relationship between the given variable(s).
2-2 Sem	**Subject Name and Code: OPERATING SYSTEMS (20CS4006)**

CO-1	Learn the overview of different operating systems and system calls.
CO-2	Design various Scheduling algorithms and also know how to manage the process.
CO-3	Understand the concept of synchronization and design deadlock prevention and avoidance algorithms.
CO-4	Compare and contrast various memory management schemes.
CO-5	Discuss different disk scheduling algorithms and file system structure and management.
2-2 Sem	**Subject Name and Code: COMPILER DESIGN(20CS4009)**
CO-1	Design, develop, and implement a compiler. And also use LEX tool for developing a scanner for the given language.
CO-2	Design and implement LL and LR parsers. And also use YACC tool for developing a parser for the given language.
CO-3	Study about synthesized and inherited attributes and also generate different types of intermediate code forms.
CO-4	Design the good symbol table, to access easily. And also apply machine dependent code optimization techniques.
CO-5	Apply algorithm to generate machine code, and also apply machine dependent code-optimization techniques
2-2 Sem	**Subject Name and Code: Managerial Economics and Financial Accountancy(20HS4002)**
CO-1	Understanding of Managerial Economics, demand Analysis, Measurement of Demand and Demand Forecasting.
CO-2	Application of production tools and techniques to increase the production, Analyse production functions and application of cost control techniques.
CO-3	Understanding of market structures, types of Business Organization and Business Cycles
CO-4	Understand of Accounting & Financing Analysis and Prepare Financial Statements and the usage of various Accounting tools for Financial Analysis
CO-5	To evaluate various investment project proposals with the help of capital budgeting techniques for decision making
2-2 Sem	**Subject Name and Code: OBJECT ORIENTED PROGRAMMING THROUGH JAVA LAB(20ES4109)**
CO-1	Create simple applications using classes, objects and inheritance
CO-2	Apply parallel processing applications using threads
CO-3	Develop GUI applications using AWT
2-2 Sem	**Subject Name and Code: OPERATING SYSTEMS LAB (20CS4106)**
CO-1	Compare the performance of various CPU Scheduling Algorithms
CO-2	Implement Semaphores
CO-3	Analyze the performance of the various Page Replacement Algorithms
2-2 Sem	**Subject Name and Code: COMPILERDESIGN LAB(20CS4109)**
CO-1	Implement LEX, YACC tools
CO-2	Implement Scanning Techniques
CO-3	Implement Parsing Techniques
2-2 Sem	**Subject Name and Code: R-PROGRAMMINGLAB(Skill Course)(20CS4203)**
CO-1	Be able to use R to solve statistical problems
CO-2	Be able to implement and describe Monte Carlothe technology
CO-3	Be able to minimize and maximize functions using R

Signature of the HOD

Head of the Department
Science & Engineering

Signature of the Principal

PRINCIPAL

RAGHU ENGINEERING COLLEGE

(Autonomous)
(Approved by AICTE, Affiliated to JNTU Kakinada)
(Accredited by NBA (CIVIL, EEE, MECH, ECE, CSE & NAAC 'A' Grade)
Dakamarri, Bheemunipatnam Mandal, Visakhapatnam Dist. – 531 162 (A.P.)
Ph: +91-8922-248001, 248002 Fax: + 91-8922-248011
e-mail: principal@raghuenggcollege.com website: www.raghuenggcollege.com

Department of Computer Science and Engineering

AR20 Regulation III B.Tech Course Outcomes

3-1 Sem	**Subject Name and Code: DESIGN AND ANALYSIS OF ALGORITHMS(20CS5018)**
CO-1	Analyze running times of algorithms using asymptotic analysis.
CO-2	Apply the divide-and-conquer paradigm for searching and sorting techniques.
CO-3	Understand the concepts of connected and weighted graphs and spanning trees.
CO-4	Apply the greedy paradigm for solving complex problems and solve problems using the dynamic programming paradigm. `
CO-5	Make use of backtracking and branch and bound technique when an algorithmic design situation calls for it.
3-1 Sem	**Subject Name and Code: COMPUTER NETWORKS(20CS5012)**
CO-1	Conceptualize the data communication models using OSI/ISO and TCP/IP protocol architectures
CO-2	Understand different multiplexing techniques
CO-3	Inferring protocols implemented in data link layer for error and flow control
CO-4	expressing the features of routing mechanisms and congestion control algorithms
CO-5	understand the features of transport and application layer protocols
3-1 Sem	**Subject Name and Code: DATABASE MANAGEMENT SYSTEMS(20CS5019)**
CO-1	Draw Entity-Relationship diagrams to represent simple database application scenarios
CO-2	Write SQL queries for a given context in the relational database.
CO-3	To apply normalization techniques.
CO-4	Describe transaction processing and concurrency control concepts.
CO-5	Apply the Hashing Techniques on database.
3-1 Sem	**Subject Name and Code: DISTRIBUTED COMPUTING PE-1(20CS5316)**
CO-1	Gain knowledge on characterization of distributed systems
CO-2	Gain knowledge on Inter-process communication.
CO-3	Understands the operation process of distributed objects & remote invocation
CO-4	Understands operating systems support for distributed computing.
CO-5	Understands transaction process & recovery in a distributed environment.
3-1 Sem	**Subject Name and Code: PRINCIPLES OF PROGRAMMING LANGUAGES PE-1(20CS5019)**
CO-1	Describe syntax and semantics of programming languages.
CO-2	Explain data, data types, and basic statements of programming languages.
CO-3	Design and implement subprogram constructs.
CO-4	Apply object – oriented, concurrency, and event handling programming constructs.
CO-5	Understand and adopt new programming languages like Scheme, ML and prolog.
3-1 Sem	**Subject Name and Code: ADVANCED DATA STRUCTURES PE-1 (20CS5321)**
CO-1	Apply the sorting techniques and hashing techniques on data.
CO-2	Understand the priority queues and advanced heap techniques.
CO-3	Understand the binary search tree techniques.
CO-4	Implementation of multi-way search trees.
CO-5	Understand the digital search structures.

3-1 Sem	**Subject Name and Code: ARTIFICIAL INTELLIGENCE PE-1 (20AI5311)**
CO-1	To be able understand Artificial Intelligence and problem-solving strategies
CO-2	To use different logic concepts in AI
CO-3	To analyze various knowledge representation approaches
CO-4	To build expert systems
CO-5	To understand fuzzy sets and fuzzy logic
3-1 Sem	**Subject Name and Code: DATA BASE MANAGEMENT SYSTEM LAB (20CS5119)**
CO-1	Create database with different types of integrity constraints and use the SQL commands such as DDL, DML, TCL to access data from database objects.
CO-2	Implement and elaborate SQL joins and sub queries.
CO-3	Programming PL/SQL including stored procedures, cursors.
3-1 Sem	**Subject Name and Code : COMPUTER NETWORKS LAB (20CS5112)**
CO-1	Implementation of different communication protocols.
CO-2	Implement the error detection and correction in Data Link Layer.
CO-3	Implement the different routing protocols in Network Layer.
3-1 Sem	**Subject Name and Code: AWS CLOUD PRACTIONER(Skill Course) (20CS5205)**
CO-1	Understand well-architected framework and different services available with AWS.
CO-2	Create an AWS basic VPC architecture.
CO-3	Demonstrate the use of compute and server less services.
CO-4	Differentiate between different storage services like Amazon S3, Amazon EFS, Amazon EBS, Amazon RDS, Redshift, etc.
CO-5	Creating scalable and monitoring applications.
3-1 Sem	**Subject Name and Code: ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE (20MC5503)**
CO-1	Identify the concept of Traditional knowledge and its importance.
CO-2	Explain the need and importance of protecting traditional knowledge.
CO-3	Illustrate the various enactments related to the protection of traditional knowledge.
CO-4	Interpret the concepts of Intellectual property to protect the traditional knowledge.
CO-5	Explain the importance of Traditional knowledge in Agriculture and Medicine.
3-2 Sem	**Subject Name and Code: DATA WARE HOUSING AND MINING(20CS6033)**
CO-1	Understand basic concepts in Data Warehouse and data mining.
CO-2	Understand the need and importance of preprocessing techniques
CO-3	Analyze Classification algorithms
CO-4	Analyze and evaluate performance of algorithms for Association Rules.
CO-5	Analyze Clustering algorithms
3-2 Sem	**Subject Name and Code: MOBILE COMPUTING(20IO6022)**
CO-1	Understand the GSM, GPRS and software model for mobile computing..
CO-2	Understand SDMA, FDMA, TDMA, CDMA
CO-3	Understand the functionality of Mobile network layer.
CO-4	Understand the functionality of Mobile Transport Layer.
CO-5	Demonstrate the Adhoc networks concepts and its routing protocols.
3-2 Sem	**Subject Name and Code: WEB TECHNOLOGIES(20CS6026)**
CO-1	Implement web based applications using features of HTML and CSS
CO-2	Build dynamic web pages using JavaScript
CO-3	Write a server side Java application using Servlet and apply JSP concepts for server side Java application
CO-4	Implement the web based applications using effective data base access with rich client interaction
CO-5	Use and execute test frameworks, test cases for Java programs and build interactive web pages using AJAX

3-2 Sem	**Subject Name and Code: INTRODUCTION TO EMBEDDED SYSTEM PE-II(20IO6334)**
CO-1	Understand the basic concepts of an embedded system and able to know an embedded system design approach to perform a specific function.
CO-2	Analyze the hardware components required for an embedded system and the design approach of an embedded hardware
CO-3	Distinguish the various embedded firmware design approaches on embedded environment.
CO-4	Understand how to integrate hardware and firmware of an embedded system using real time operating system.
CO-5	Understand the embedded system development and its testing
3-2 Sem	**Subject Name and Code: HUMAN COMPUTER INTERACTION PE-II (20CS6336)**
CO-1	Explain the capabilities of both humans and computers from the viewpoint of human information processing.
CO-2	Describe typical human–computer interaction (HCI) models, styles, and various historic HCI paradigms.
CO-3	Apply an interactive design process and universal design principles to designing HCI systems.
CO-4	Describe and use HCI design principles, standards and guidelines.
CO-5	Analyze and identify user models, user support, socio-organizational issues, and stakeholder requirements of HCI systems.
3-2 Sem	**Subject Name and Code: IMAGE PROCESSING PE-II (20AI6330)**
CO-1	Illustrate the fundamental concepts involved in Digital image processing.
CO-2	Apply various image enhancement techniques in spatial domains.
CO-3	Apply various image restoration techniques.
CO-4	Understand compression techniques and morphological operations.
CO-5	Evaluate methodologies for image segmentation.
3-2 Sem	**Subject Name and Code: SOFTWARE TESTING METHODOLOGY PE-II (20CS6337)**
CO-1	Understand software testing as a fundamental component of software life cycle
CO-2	Define the scope of Software Testing projects
CO-3	Efficiently perform testing activities using modern software tools
CO-4	Estimate cost of a testing project and manage budgets
CO-5	Prepare test plans and schedules for a Testing project
3-2 Sem	**Subject Name and Code: DATA WARE HOUSING AND MINING LAB(20CS6133)**
CO-1	The data mining process and important issues around data cleaning, pre-processing and integration.
CO-2	The principle algorithms and techniques used in data mining, such as association mining, classification and prediction.
CO-3	The principle algorithms and techniques used in data mining, such as clustering.
3-2 Sem	**Subject Name and Code: MOBILE APPLICATION DEVELOPMENT LAB(20IO6122)**
CO-1	Able to use and configure tools available for Android application development
CO-2	Able to develop UI based Mobile Application using Android Studio
CO-3	Able to design and develop an application using various services, database
3-2 Sem	**Subject Name and Code: WEB TECHNOLOGIES LAB(20CS6126)**
CO-1	Implement web based applications using features of HTML, CSS and JavaScript
CO-2	Use server side scripting with Servlets, JSP and AJAX to generate the web pages dynamically along with database connectivity
CO-3	Use and execute test frameworks, test cases for Java programs and build interactive web pages using AJAX
3-2 Sem	**Subject Name and Code: Employability and Corporate Readiness Skills (Skill Course)(20HS6209)**
CO-1	Demonstrate professional behaviour for corporate requirement

CO-2	Confidence in attending campus recruitment interviews
CO-3	Developing accuracy in attempting tests in verbal ability for campus recruitment tests.
CO-4	Will be able to apply various quantitative techniques
CO-5	Will be able to reason, model, and make decisions with mathematical, Statistical, and quantitative information.
3-2 Sem	**Subject Name and Code: INDIAN CONSTITUTION(20MC6504)**
CO-1	Understand historical background of the constitution making and its importance for building a democratic India.
CO-2	Understand the functioning of three wings of the government ie., executive, legislative and judiciary
CO-3	Understand the value of the fundamental rights and duties for becoming good citizen of India.
CO-4	Analyze the decentralization of power between central, state and local self-government.
CO-5	Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.

Signature of the HOD

Head of the Department
Computer Science & Engineering
Raghu Engineering College
VISAKHAPATNAM-531162

Signature of the Principal

PRINCIPAL
RAGHU ENGINEERING COLLEGE
Dakamarri (V) Bheemunipatnam (M)
Visakhapatnam Dist. - 531 162