

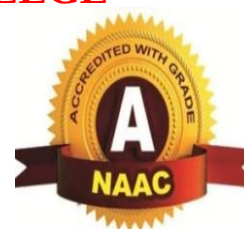


TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

(Sponsored by TKR Educational Society, Approved by AICTE, Affiliated to JNTUH
Accredited by NAAC with 'A' Grade. Accredited by NBA)

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Department of Computer Science and Engineering

Students who joined from 2020-2021(R20)

Course Outcomes	Course Name: MATHEMATICS – I Course Code: 20MA1BS01
CO 1	Write the matrix representation of a set of linear equations and to analyse the solution of the system of equations
CO 2	Reduce the quadratic form to canonical form using orthogonal transformations.
CO 3	Analyse the nature of sequence and series.
CO 4	Apply the mean value theorems
CO 5	Find the extreme values of functions of two variables with / with out constraints.

Course Outcomes	Course Name: Chemistry Course Code: 20CH1BS02
CO 1	Understand the atomic and molecular orbitals and conductivity of the materials using band theory.
CO 2	Apply the principle of potable water for industrial and domestic purposes.
CO 3	Make use of essential aspects of Electro chemistry and Corrosion in industry.
CO 4	Analyze the knowledge of stereochemistry and synthetic aspects useful for understanding reaction pathways.
CO 5	Interpret the spectroscopic principles in medical field.

Course Outcomes	Course Name: Basic Electrical Engineering Course Code: 20EE1ES01
CO 1	Solve electrical circuits using basic network laws and theorems.
CO 2	Understand basic AC Circuits and effect of resonance.

CO 3	Extract the working and operation of Transformers and its applications.
CO 4	Articulate working principles of Electrical Machines of both AC and DC.
CO 5	Describe about components of Components of LT Switchgear and installations.

Course Outcomes	Course Name: English Course Code: 20EN1HS01
CO 1	Use English Language effectively in spoken and written communication.
CO 2	Understand the given texts and respond appropriately.
CO 3	Articulate confidently in various contexts and different cultures.
CO 4	Demonstrate basic proficiency in English including reading and listening comprehension, writing and speaking skills.
CO 5	Choose appropriate vocabulary in oral and written communication.

Course Outcomes	Course Name: Engineering Workshop Course Code: 20ME1ES05
CO 1	Demonstrate various machine tools and their operations.
CO 2	Apply different workshop trades like fitting, carpentry, foundry and welding.
CO 3	Practice various workshop trades including Tin smithy and Black smithy.
CO 4	Identify suitable tools for different trades of engineering processes including drilling, material removing, measuring and chiseling.
CO 5	Apply basic electrical engineering knowledge for house wiring practice.

Course Outcomes	Course Name: Engineering Chemistry Laboratory Course Code: 20CH1BS03
CO 1	An ability to gain knowledge about different types of qualitative and quantitative estimation.
CO 2	An ability to analyze the quality of water by determining its chemical parameters.
CO 3	To acquire the skill for the preparation of common drugs like Paracetamol and Aspirin.
CO 4	estimation of rate constant of a reaction from concentration –time relationships.
CO 5	Determination of physical properties like adsorption And viscosity oflubricants.

Course Outcomes	Course Name: English Language and Communication Skills Lab Course Code: 20EN1HS02
CO 1	Better understanding of nuances of English language through audio- visual experience and group activities.
CO 2	Neutralization of accent for intelligibility by overcoming mother tongue influence.
CO 3	Develop the skill of using appropriate language in various speaking contexts.
CO 4	Understand how to use language to make formal presentations.
CO 5	Speaking skills with clarity and confidence which in turn enhances their inter personal skills.

Course Outcomes	Course Name: Basic Electrical Engineering Laboratory Course Code: 20EE1ES03
CO 1	Understand the basic electrical laws.
CO 2	Sketch the response of different types of electrical circuits to different excitations.
CO 3	Solve the response of electrical circuits under resonance condition.
CO 4	Understand the measurement, calculation and relation between the basic electrical parameters
CO 5	Categorize the basic characteristics of transformers and electrical machines.

Course Outcomes	Course Name: Mathematics-II Course Code: 20MA2BS04
CO 1	Determine different types of ordinary differential equations of first order.
CO 2	Apply the concepts of higher differential equation to solve real world problems.
CO 3	Apply the concept of multiple integrals to find areas and volumes
CO 4	Evaluate the centre of mass and gravity for cubes, sphere and rectangular parallelepiped.
CO 5	Calculate the line, surface and volume integrals and converting them from one to another.

Course Outcomes	Course Name: Applied Physics Course Code: 20AP2BS05
CO 1	Demonstrate the fundamentals concepts of modern physics and quantum mechanics.
CO 2	Design various electronic circuits using fundamentals of Semiconductor physics.
CO 3	Apply the concepts of optoelectronic in various optoelectronic devices.
CO 4	Apply the learned knowledge of laser and fibre optics in communication system.
CO 5	Analyze various magnetic and Electromagnetic properties applicable in magnetic materials.

Course Outcomes	Course Name: Engineering Graphics Course Code: 20ME2ES05
CO 1	Apply the principles of engineering graphics to create engineering drawings of various geometric construction, conic section, curves and scales as per BIS standards.
CO 2	Construct orthographic projections for points, lines and planes in different quadrants and auxiliary views.
CO 3	Draw the sectional views and true shape of sections of solids, by applying the principles of projections.
CO 4	Draw the development of surfaces and intersections of solids in real time situations.
CO 5	Develop isometric and orthographic views of the objects.

Course Outcomes	Course Name: Applied Physics Lab Course Code: 20AP2BS06
CO 1	compute the (V-I/P-I) characteristics of LED, LASER, and Solar cell.
CO 2	calculate the energy gap of semiconductor diode.
CO 3	Interpret the theory of Hall Effect with experiment by determining the Hall coefficient.
CO 4	Examine the bending losses for different Optical fiber Cables.
CO 5	Construct various circuits –Resonance, Time constant and Magnetic field using LCR, RC, Stewarton Gees circuits.

Course Outcomes	Course Name: Environmental science Course Code: 20MC2ES07
CO 1	Develop an understanding of ecological perspective and the value of the environment.
CO 2	Understand the significance of various natural resources and its management.
CO 3	Demonstrate a comprehensive understanding of the world's biodiversity and the importance of its conservation.
CO 4	Identify different types of pollution and their control measures, Discover effective methods of waste management and come out with best possible solutions.
CO 5	Raise awareness about environmental laws and sustainable development.

Course Outcomes	Course Name: Programming for Problem Solving Course Code: 20CS2ES04
CO1	Build the algorithm for the given unsolved problems.
CO2	Apply concepts of arrays structures,strings and pointers to find solutions to problems.
CO3	Apply various preprocessor commands in a given different real time situations.
CO4	Dissect a problem into sub functions to develop modular reusable code.
CO5	Demonstrate various searching, sorting techniques along with complexity analysis.

Course Outcomes	Course Name: Programming for Problem Solving Lab Course Code: 20CS2ES06
CO1	Formulate The Algorithms for SimpleProblems.
CO2	Translate the given algorithms to C program.
CO3	Correct the logical errors found duringprogram execution.
CO4	Make use of pointers in different types to modularize the code with functions.
CO5	Apply the appropriate sorting techniques for the given list of elements.

Course Outcomes	Course Name: Computer Oriented Statistical Methods Course Code: 20MA3BS08
CO1	Make use of concepts of probability and distributions to given case studies.
CO2	Calculate the Mean, Variance and covariance of given discrete random variable.
CO3	Apply the concept of Uniform Distributions to find out continuous distribution values.
CO4	Estimate the of test of hypothesis to take decision for profit or loss in a given problem.
CO5	Describe stochastic principles to simplify processes that satisfy Markov Property.

Course Outcomes	Course Name: Computer Organization Course Code: 20CS3PC01
CO1	Demonstrate the functional organization of digital computer system.
CO2	Classify different addressing modes for fetching machine instructions
CO3	Apply different data representation formats and perform arithmetic operations.
CO4	Tell the design of input/output organization and memory organization of computer.
CO5	Demonstrate the concepts of parallel processing, pipelining and inter process communication.

Course Outcomes	Course Name: Object Oriented Programming using C++ Course Code: 20CS3PC02
CO1	Identify the object-oriented programming approach with respect to C++.
CO2	Apply the concepts of classes for data abstraction for the given set of programs.
CO3	Apply the concepts of classes for data abstraction for the given set of programs.
CO4	Construct the programs by using Input/output streams.

CO5	Discover the exceptions handling process in object-oriented programming.
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Course Outcomes	Course Name: Data Structures Course Code: 20CS3PC03
CO1	Choose appropriate data structures to represent data items in real world problems with linear data structures
CO2	Apply dictionaries and hash tables to overcome problems of sequential data structures.
CO3	Develop the programs using trees for nonlinear data structures.
CO4	Measure the computational efficiency of the principal algorithms for sorting and searching.
CO5	Implement the graph traversal methods in nonlinear data structures.

Course Outcomes	Course Name: Analog and Digital Electronics Course Code: 20CS3ES08
CO1	The Understand the characteristics and utilization of various components.
CO2	Design and analyze small signal amplifier circuits.
CO3	Understand and analyze operation logic gates and realize logic gates with logic families
CO4	Design and analyze operation of combinational and sequential circuits
CO5	Design flip-flops, shift registers and counters

Course Outcomes	Course Name: IT WORKSHOP Lab Course Code: 20CS3PC04
CO1	Gain the knowledge of computer hardware.
CO2	Install the system software in the specified hardware.
CO3	Build the computer by assembling different parts and make sure of troubleshooting.
CO4	Make use of the Web browsers, email and newsgroups.
CO5	Craft professional word documents, excel spreadsheet and powerpoint presentations.

Course Outcomes	Course Name: Data Structures Lab Course Code: 20CS3PC05
CO1	Design an algorithm along with the complexity for a given problem.
CO2	Able to implement the stack, queues using static and dynamic data structures.

CO3	Develop the programs to perform different operations on linked list.
CO4	Make use of different tree traversal techniques for nonlinear data structures.
CO5	Develop programs for searching and sorting techniques by different methods

Course Outcomes	Course Name: Object Oriented Programming using C++ Lab Course Code: 20CS3PC06
CO1	Ability to develop programming solutions for a range of problems using object-oriented programming techniques.
CO2	Apply the concepts of classes for data abstraction for the given set of programs.
CO3	Build the learned knowledge of polymorphism for the given set of problems.
CO4	Construct the programs by using Input/output streams.
CO5	Demonstrate the exceptions handling process in object-oriented programming.

Course Outcomes	Course Name: Professional and Engineering Ethics Course Code: 20MC3HS01
CO1	To gain the knowledge on different codes of ethics, such as personal & professional, accountability, controllability, governability, life skills and consequentialism.
CO2	To perceive moral values in different fields in different ways.
CO3	To follow value-based education system by learning different techniques.
CO4	To assess workplace responsibilities by following different case studies.
CO5	To realize the workplace responsibilities, honesty, integrity, and promise-keeping & trustworthiness, loyalty, fairness.

Course Outcomes	Course Name: Quantitative Analysis-I Course Code: 20MC3BS02
CO1	To Understand and Practice Simplifications.
CO2	To Understand and Practice the Problems on Ages.
CO3	To Understand and Practice the Quadratic Equations.
CO4	To Understand and Practice arrangement and selection in their daily life.
CO5	To Understand and Practice commercial mathematics.

Course Outcome	Course Name: Discrete Mathematics Course Code: 20MA4PC07
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CO1	Construct precise mathematical proofs.
CO2	Predict logic and set theory to formulate precise statements.
CO3	Apply the concept of group theory in given Algebraic System.
CO4	Calculate linear recurrence relations using advanced counting techniques.
CO5	Explain graph theory in solving computing problems.

Course Outcomes	Course Name: Business Economics and Financial Analysis Course Code: 20MS4HS
CO1	Identify the various forms of business and its impacts on one economic variable.
CO2	To realize the demand fluctuations and factors influencing the demand.
CO3	To analyze different market structures, pricing strategies and forms of business organization.
CO4	To study the firms, financial position and the financial statements of a company.
CO5	To evaluate different types of financial ratios for knowing liquidity and profitability positions of business concern.

Course Outcomes	Course Name: Java Programming Course Code: 20CS4PC08
CO1	Apply the basic concepts of OOPs including data hiding to develop Java Applications.
CO2	Utilize the concepts of Packages and Stream based IO to build java API.
CO3	Implement the concepts of Exception handling and Multithreading.
CO4	Develop the applications using java collection framework.
CO5	Design GUI Applications using AWT Swing and Event Handling

Course Outcomes	Course Name: Operating Systems Course Code: 20CS4PC09
CO1	Explore the fundamental components of a computer operating system
CO2	Choose appropriate scheduling algorithm for process management

CO3	Analyze the methods of handling deadlock to maintain appropriate process synchronization
CO4	Choose appropriate page replacement algorithm for effective memory management
CO5	Apply the various system calls to enable the operating system services

Course Outcomes	Course Name: Database Management Systems Course Code: 20CS4PC10
CO1	Gain knowledge of fundamentals of DBMS, database design and normal forms
CO2	Master the basics of SQL for retrieval and management of data.
CO3	Be acquainted with the basics of transaction processing and concurrency control.
CO4	Familiarity with database storage structures and access techniques
CO5	Able to manage the data by using hashing techniques.

Course Outcomes	Course Name: Operating Systems Lab Course Code: 20CS4PC11
CO1	Implement programs based on operating system concept of scheduling
CO2	Develop a program based on operating system concept of deadlock management.
CO3	Simulate the concept to implement programs based on operating system concept of file management
CO4	Apply the concept of memory management for implementing a program
CO5	Implement C programs using UNIX system calls

Course Outcomes	Course Name: Java Programming Lab Course Code: 20CS4PC12
CO1	Write programs for given real world problems using java collection framework.
CO2	Build the programs using abstract classes to solve the specified problems.
CO3	Make use of the concept of multi-threading to allow parallel processing in the given program.
CO4	Create GUI programs using Java swing controls for the given example program.
CO5	Create web pages using Applets for given example problem.

Course Outcomes	Course Name: Database Management Systems Lab Course Code: 20CS4PC13
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CO1	Design a database schema for given problem data.
CO2	Build a GUI application
CO3	Apply the normalization techniques for development of application software to realistic problems
CO4	Formulate queries using SQL DML/DDL/DCL commands
CO5	Implement triggers to raise as per real time data and also Implement concurrency control mechanisms

Course Outcomes	Course Name: Gender Sensitization Lab Course Code: 20MC4HS03
CO1	Students will have developed a better understanding of important issues related to gender in contemporary India.
CO2	Students will be sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature and film.
CO3	Students will attain a finer grasp of how gender discrimination works in our society and how to counter it.
CO4	Students will acquire insight into the gendered division of labour and its relation to politics and economics.
CO5	Men and women students and professionals will be better equipped to work and live together as equals.

Course Outcomes	Course Name: Quantitative Logical and Reasoning Course Code: 20MC4BS03
CO1	To understand and practice logical reasoning
CO2	To understand and practice the different classifications
CO3	To understand and practice different Sitting Arrangements, Data Sequences.
CO4	To understand and practice the Non-Verbal Reasoning.
CO5	To understand and practice the graphs.

Course Outcomes	Course Name: Formal Languages and Automata Theory Course Code: 20CS5PC14
CO1	Make use of the concept of automata and to recognize the appropriate languages.
CO2	Model finite state machine for the given regular expression and languages
CO3	Construct context free grammars for any given formal languages
CO4	Construct Turing machine for the given grammar.

CO5	Distinguish between decidability and undecidability.
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Course Outcomes	Course Name: Software Engineering Course Code: 20CS5PC15
CO1	Make use of the basic software engineering methods and process models.
CO2	Identify the different requirements, requirement engineering process and system models.
CO3	Analyze the software architectural styles, conceptual model of UML diagrams for software developing life cycle.
CO4	Choose different testing strategies and product metrics to verify the software quality.
CO5	Apply the various approaches in risk management and quality management for the software quality assurance

Course Outcomes	Course Name: Professional Elective- I(AI) Course Code: 20CS5PE11
CO1	Ability to formulate an efficient problem space for a problem expressed in natural language
CO2	Select a search algorithm for a problem and estimate its time and space complexities
CO3	Possess the skill for representing knowledge using the appropriate technique for a given problem
CO4	Possess the ability to apply AI techniques to solve problems of game playing, and machine learning
CO5	Ability to design Expert system.

Course Outcomes	Course Name: Design and Analysis of Algorithms Course Code: 20CS5PC16
CO1	The student will be able toMake use of divide and conquer methods for developing algorithms.
CO2	Apply the concept of backtracking to solve the optimization problems.
CO3	Solve the optimization problems using dynamic programming methodology.
CO4	Solve the optimization problem by using Greedy method.reusable code and learn dynamic memory allocation
CO5	Solve the optimization problem by using branch and bound method and NP-Hard and NP-Completefor the given example problems.

Course Outcomes	Course Name: Professional Elective- II(OOAD) Course Code: 20CS5PE22
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CO1	Discuss the overview of object-oriented modeling and benefits of each.
CO2	Make use of the advance object-oriented approach from the traditional approach for design and development of system.
CO3	Implement Unified Modeling Language (UML) for representation of an object-oriented system using different modeling views
CO4	Apply appropriate design patterns to model or design of the system
CO5	Prepare unified modeling techniques for case studies

Course Outcomes	Course Name: Professional Elective- II Lab (OOAD) Course Code: 20CS5PE27
CO1	Discuss the overview of object-oriented modeling and benefits of each.
CO2	Make use of the advance object-oriented approach from the traditional approach for design and development of system.
CO3	Implement Unified Modeling Language (UML) for representation of an object-oriented system using different modeling views.
CO4	Apply appropriate design patterns to model or design of the system.
CO5	Prepare unified modeling techniques for case studies

Course Outcomes	Course Name: Design and Analysis of Algorithms lab Course Code: 20CS5PC16
CO1	Able to design and Implement C programs to sort the values by using Quick sort & Merge sort algorithms.
CO2	Able to implement C program to solve the given problems using Backtracking.
CO3	Able to implement C program to solve job sequencing with deadlines, single source shortest path problem using Greedy method.
CO4	Able to implement C program to solve minimum cost spanning trees using Primes & Kruskals algorithm.
CO5	Able to design C program to implement 0/1 Knapsack & OBST using dynamic programming.

Course Outcomes	Course Name: Advanced Communication Skills Lab Course Code: 20EN5HS04
CO1	Develop LSRW skills and soft skills.
CO2	Demonstrate the nuances of language through group activities and oral presentations.

CO3	Build written communication skills to meet the needs of their academic and career endeavors.
CO4	Take part in interviews with confidence thereby enhancing their employability skills.
CO5	Choose appropriate language in their social and professional communication.

Course Outcomes	Course Name: Summer Internship Course Code: 20CS5PW01
CO1	Analyze the problem formulation and solution of the selected project.
CO2	Develop solutions for problems using modern tools for sustainable development.
CO3	Demonstrate ethical and professional sustainability while working in a team and communicate effectively for the benefit of the society.
CO4	Understand the engineering, finance and management principles.
CO5	Develop a software application or solution to complex engineering problem using modern tools

Course Outcomes	Course Name: Intellectual Property Rights Course Code: 20MC5HS05
CO1	Define intellectual property and its importance in modern society
CO2	Describe the historical and legal development of intellectual property
CO3	Analyze the criteria for patent infringement and the remedies available for patent holders
CO4	Discuss the fair use doctrine and other exceptions to copyright protection
CO5	Explain the elements of trade secret protection and strategies for maintaining secrecy

Course Outcomes	Course Name: Personality and Soft Skills Development Course Code: 20MC5HS06
CO1	Students will possess the personality development techniques and communication skills.
CO2	Students will possess knowledge about leadership.
CO3	Students will be able to acquire the skills to manage stress and conflict.
CO4	Students will be able to acquire Problem Solving & Critical Thinking.
CO5	Students will be able to acquire different resume preparation & Essay Writing Techniques.

Course	Course Name: Computer Networks Course Code: 20CS6PC18
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Outcomes	
CO1	Demonstrate the concepts of Data communication procedures and various models of Networking.
CO2	Summarize the features of various protocols used in Data Link Layer.
CO3	Identify appropriate routing algorithm for broadcasting in Network Layer.
CO4	Demonstrate the services and features of TCP/UDP protocols in Transport Layer.
CO5	Summarize the services and features of Application Layer with respect to World Wide Web

Course Outcomes	Course Name: Compiler Design Course Code: 20CS6PC19
CO1	Discuss the major phases of compilers and use the knowledge of the Lex tool.
CO2	Develop the parsers and experiment with the knowledge of different parsers design without automated tools.
CO3	Describe intermediate code representations using syntax trees and DAG's as well as uses this knowledge to generate intermediate code.
CO4	Classify various storage allocation strategies and explain various data structures used in symbol tables.
CO5	Summarize various optimization techniques used for dataflow analysis and generate machine code from the source code of a novel language.

Course Outcomes	Course Name: Machine Learning Course Code: 20CS6PC20
CO1	Able to apply the concept of concepts of computational intelligence in machine learning
CO2	Able to concepts of computational intelligence in machine learning
CO3	Able to Infer the Neural Networks and its usage in machine learning application
CO4	Able to Infer the Neural Networks and its usage in machine learning application
CO5	Able to Gain knowledge on Bayesian Networks, Reinforcement

Course Outcomes	Course Name: Web Technologies Course Code: 20CS6PC21
CO1	Apply the concepts of HTML and PHP in creating web pages and connecting to database (MySQL)
CO2	Apply the concepts of XML for structuring the web pages.
CO3	Make use of Servlets to create dynamic web pages in client-server architecture.

CO4	Make use of JSP to develop interactive web pages.
CO5	Apply the techniques of Java script in client-side scripting

Course Outcomes	Course Name: PE-III- SOFTWARE TESTING METHODOLGIES Course Code: 20CS6PE34
CO1	Design and develop the path testing
CO2	Transaction Flow Testing.
CO3	Gain knowledge in Domain testing
CO4	Summarize the State Graphs.
CO5	Analyze Graph Metrics & their applications.

Course Outcomes	Course Name: Open Elective-PRINCIPLES OF ELECTRONIC COMMUNICATION Course Code: 20EC6OE11
CO1	Use the concepts of modulation in calculating various parameters.
CO2	Apply different modulation and demodulation techniques in suitable application
CO3	Analyze the operation of telecommunication systems and different area networks
CO4	Acquiring knowledge on satellite communications and optical communication
CO5	Apply different technologies in cellular and mobile communications

Course Outcomes	Course Name: Computer Networks & Web Technologies Lab Course Code: 20CS6PC22
CO1	Implement data link layer framing methods
CO2	Analyze error detection and error correction codes.
CO3	Implement and analyze routing and congestion issues in network design.
CO4	Implement Encoding and Decoding techniques used in presentation layer
CO5	To be able to work with different network tools

Course Outcomes	Course Name: Machine Learning using Python-Lab Course Code: 20CS6PC23
CO1	Memorize the basics of Python programming.

CO2	Implement modern notions in data analysis-oriented computing;
CO3	Analyzing datasets using python programming.
CO4	Be capable of confidently applying common Machine Learning algorithms in practice and implementing in their own;
CO5	Be capable of performing experiments in Machine Learning using real-world data.

Course Outcomes	Course Name: PE-III Lab-SOFTWARE TESTING METHODOLOGIES LAB Course Code: 20CS6PE39
CO1	Design and develop the best test strategies in accordance to the development model
CO2	Design GUI checkpoint single & multiple objects.
CO3	Design GUI checkpoint for Object/window.
CO4	Design data driven batch.
CO5	Implementation of interrupt execution

Course Outcomes	Course Name: Constitution of India Course Code: 20MC6HS07
CO1	Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.
CO2	Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
CO3	Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution
CO4	Discuss the passage of the Hindu Code Bill of 1956.
CO5	Understand about fundamental rights under constitution of India.

Course Outcomes	Course Name: Basic Technical Training Course Code: 20MC6CS01
CO1	Implementation of the Database operations in a real time project
CO2	Design an Java application with database connectivity
CO3	Learning basic of Python programming language
CO4	Learning PHP scripting language basic concepts
CO5	Learn advance topics like JSP and connectivity of PHP script with JSP and servlet

Course Outcomes	Course Name: Block Chain Technology Course Code: 20CS7PC24
CO1	Describe the basic concepts and technology used for block chain.
CO2	Describe the primitives of the distributed computing and cryptography related to Mock chain
CO3	Illustrative the concepts of Bit coin and their usage.
CO4	To describe the concepts of currency, Token, and Campus coin.
CO5	To analyze the challenges and discuss the government regulations.

Course Outcomes	Course Name: Data Science and R-Programming Course Code: 20CS7PC25
CO1	Make use of the concepts of R programming language.
CO2	To use R to solve statistical problems.
CO3	To apply and able to implement functions to list and to access data frames.
CO4	Able to minimize and maximize functions using R.
CO5	To demonstrate advanced skills in data acquisition and management.

Course Outcomes	Course Name: Professional Elective- IV(CC) Course Code: 20CS7PE44
CO1	To discuss the concepts of computing paradigm.
CO2	To memorize the virtualization and cloud computing concepts
CO3	To get the knowledge of cloud computing architecture layer management
CO4	To discuss the various service delivery models
CO5	To describe the various cloud service providers.

Course Outcomes	Course Name: Professional Elective- V(SPPM) Course Code: 20CS7PE55
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CO1	Infer the concept of software process assessment and reference model.
CO2	To get knowledge of software economics, phases in the life cycle of software development, project organization, project control and process instrumentation.
CO3	To analyze the major and minor milestones, artifacts and metrics from management and technical perspective.
CO4	To design and develop software product using conventional and modern principles of software project management.
CO5	To analyze the case study and future project management.

Course Outcomes	Course Name: Open Elective- II(ESS) Course Code: 20EE7OE22
CO1	TounderstandtheElectricalEnergyStorageTechnologies
CO2	Tounderstandtheneedof Electrical EnergyStorage
CO3	Tounderstandthe featuresofenergy storagesystems
CO4	Toknowthetypesofenergystoragesystems
CO5	Tounderstandthevariousapplicationsofenergystoragesystems

Course Outcomes	Course Name: R-Programming Lab Course Code: 20CS7PC26
CO1	Exploring R Language
CO2	Implementing Expressions
CO3	Object-Oriented Programming in R
CO4	Executing Your Own R Functions
CO5	Develop simple applications using R programming.

Course Outcomes	Course Name: Seminar Course Code: 20CS7PW02
CO1	The student will be engaged in the integral activities of reading, discussion and composition around a particular topic.
CO2	The student will develop presentation skills.
CO3	The student will gain confidence to face the interviews.
CO4	The student will be able to investigate the advancements in the particular topic.
CO5	The student will be able to distinguish opinions from researched calims

Course Outcomes	Course Name: Comprehensive Test Course Code: 20CS7PW03
CO1	The student will be able to face interview both at the academic and the industrial sector
CO2	The student will be able to exhibit the strength and grip on the fundamentals of the subjects studied in the previous semester
CO3	The student will be able to comprehend all the courses studied in the entire program.
CO4	The student will be able to enhance their communication skills and interactiveness.
CO5	The student will be able to access themselves in the complete course.

Course Outcomes	Course Name: Industrial Oriented Mini Project Course Code: 20CS7PW04
CO1	The student will acquire practical knowledge within the chosen area of technology for project development.
CO2	Student will able to identify and analyze projects with a comprehensive approach.
CO3	The student will able to formulate and handle projects with a systematic approach.
CO4	The student will able to develop effective communication skills for presentation of project related activities.
CO5	The student will able to formulate a real-world problem and develop its requirements.

Course Outcomes	Course Name: Project Stage- I Course Code: 20CS7PW05
CO1	Identify the problem by applying acquired knowledge.
CO2	Analyze and categorize executable project modules after considering risks
CO3	Choose efficient tools for designing project modules.
CO4	Combine all the modules through effective team work after efficient testing.
CO5	Elaborate the completed task and compile the project report.

Course Outcomes	Course Name: Advanced Technical Training Course Code: 20MC7CS02
CO1	Understand the Go Language Environment and its features.

CO2	Manipulate GO language data types such as Arrays, Strings and Pointers.
CO3	Implement code reusability, modularity, and flexibility to solve complex compositions.
CO4	Analyze predefined and user defined packages.
CO5	Servers to develop real time applications

Course Outcomes	Course Name: Organizational Behavior Course Code: 20HS8MS02
CO1	Apply the key factors to estimate the behavior of individuals and groups in organizations.
CO2	Assess the potential effects of organizational level factors (such as structure, culture and change)on organizational behavior.
CO3	Analyze organizational behavioral issues in the context of organizational behavior theories, models and concepts.
CO4	Evaluate the different aspects related to Decision Making and Controlling Process
CO5	Describe the different theories related to Individual behavior in the Organization

Course Outcomes	Course Name: Professional Elective- VI(MSE) Course Code: 20CS8PE62
CO1	Illustrateagile development,Extreme Programming&XPlifecycle.
CO2	Operatethecodingstandards.
CO3	Makeuse of Bugfreeversionfordocumentation releasing.
CO4	Discover therisksinvolvedinsoftwareplanning.
CO5	DesignarchitectureandtestingforModernsoftware engineeringprocess.

Course Outcomes	Course Name: Open Elective- III(UEE) Course Code: 20EE8OE31
CO1	Explain basic principles of electric heating and welding.
CO2	Prepare the lighting requirements for flood lighting, household and industrial needs
CO3	Calculate heat developed in induction furnace.
CO4	Sketch the speed time curves for traction
CO5	Develop the systems of Train lighting methods.

Course Outcomes	Course Name: Project Stage-II Course Code: 20CS8PW06
CO1	Identify and Finalize problem statement by surveying variety of domains.
CO2	Perform requirement analysis and identify design methodologies
CO3	Apply advanced programming techniques
CO4	Present technical report by applying different visualization tools and Evaluation metrics.
CO5	Apply engineering and management principles to achieve project goal.