



DEPARTMENT OF INFORMATION TECHNOLOGY

3.1.1 Course Outcomes:

Course Outcomes for First Year First Semester Course		
Course Title with Code	CO'S	Statement
C101 COMMUNICATIVE ENGLISH	C01	Understanding how to communicate with native speakers of English.
	C02	Questioning and answering skills are improved
	C03	Reading and writing on an idea or text
	C04	Improving paragraph writing skills
	C05	Recalling forming sentences with proper grammar and correct word forms
C1012 MATHEMATICS-I	C01	study and apply various types of convergence
	C02	solve first order differential equations and applications of first order differential equations.
	C03	solve linear differential equations of higher order
	C04	find the maximum and minimum values of functions of two variables
	C05	apply double and triple integral techniques in evaluating areas and volumes covered by integration
C103 APPLIED PHYSICS	C01	Explain the need of coherent sources and the conditions for sustained interference.
	C02	Understand the basic concepts of Laser light sources.
	C03	Describe the dual nature of matter and significance of wave function .
	C04	Explain the applications of dielectric and magnetic materials.
	C05	Identify the applications of semiconductors in electronic devices.

Course Title with Code	CO'S	Statement
C104 PROGRAMMING FOR PROBLEM SOLVING USING C	C01	Acquires skills to write, compile and debug programs in C language.
	C02	Be able to use different operators, data types and write programs that use two-way/multi-way selection.
	C03	Acquire knowledge to select the best loop construct for a given problem.
	C04	Design and implements programs to analyze the different pointer applications
	C05	Design and implements C programs with functions, File I/O operations
C105 COMPUTER ENGINEERING WORKSHOP	C01	Assemble and disassemble components of a PC
	C02	Construct a fully functional virtual machine, Summarize various Linux operating system commands,
	C03	Secure a computer from cyber threats, Learn and practice programming skill in Github, Hackerrank, Codechef, HackerEarth etc
	C04	Recognize characters & extract text from scanned images, Create audio files and podcasts
	C05	Create video tutorials and publishing, Use office tools for documentation, Build interactive presentations, Build websites, Create quizzes & analyze responses.
C106 ENGLISH COMMUNICATION SKILLS LABORATORY	C01	Making the students to read and produce phonemic transcription
	C02	Recognize and use sound assimilations in common expressions
	C03	Reading sentences that change meaning depending on word-stress
	C04	Able to avoid common mistakes in communication
	C05	Help to build confidence in the aspect of communication
C107 APPLIED PHYSICS LAB	C01	Understand the quality of instruments on the procedure level.
	C02	Analyze the types of Semiconductors using Hall Effect.
	C03	Determine the spacer by using the fillms and parallel interference.
	C04	Determine the wavelength of the laser by using Diffraction grating.
	C05	Explain the Newton's Rings setup and determine the radius of convex lens.

Course Title with Code	CO'S	Statement
C108 PROGRAMMING FOR PROBLEM SOLVING USING C LAB	C01	Gains Knowledge on various concepts of a C language.
	C02	Able to draw flowcharts and write algorithms.
	C03	Able design and development of C problem solving skills.
	C04	Able to design and develop modular programming skills.
	C05	Able to trace and debug a program.
C109 MATHEMATICS-II (LINEARALGEBRAAND NUMERICAL METHODS)	C01	Determine the rank of a matrix and solve the system of equations
	C02	Determine the Eigen values and Eigen vectors of a matrix and discuss the nature of the quadraticforms
	C03	Evaluate approximating the roots of algebraic and transcendental equations by iterative methods.
	C04	Apply Newton's forward,backward and Lagrange's for equal and unequal intervals.
	C05	Evaluatve the real definite integrals and solve the first order differential equations by numerical methods.
C110 APPLIED CHEMISTRY	C01	Discuss the structures ,properties and applications of polymers.
	C02	Specify the Quality and Composition of fuels.
	C03	Explain the mechanisim of corrosion and apply the few corrosion control methods.
	C04	Iliustrate the importance of advanced materials in engineering.
	C05	Stimulate the non conventional enegy source to produce electric power.
C111 COMPUTER ORGANIZATION	C01	Demonstrate and understanding of the design of the functional units of a digital computer system
	C02	Relate Postulates of Boolean algebra and minimize combinational functions
	C03	Recognize and manipulate representations of numbers stored in digital computers
	C04	Build the logic families and realization of logic gates.
	C05	Design and analyze combinational and sequential circuits
C112 PYTHON PROGRAMMING	C01	Develop essential programming skills in computer programming concepts like data types, containers
	C02	Apply the basics of programming in the Python language
	C03	Solve coding tasks related conditional execution, loops

	C04	Solve coding tasks related Exception handling technique
	C05	Solve coding tasks related to the fundamental notions and techniques used in objectoriented programming

C113 DATA STRUCTURES	C01	Summarize the properties, interfaces, and behaviors of basic abstract data types
	C02	Discuss the computational efficiency of the principal algorithms for sorting & searching
	C03	Use arrays, records, linked structures, stacks, queues, trees, and Graphs in writing programs
	C04	Demonstrate different methods for traversing trees
C114 APPLIED CHEMISTRY LAB	C01	Estimate the unknown solution by using volumetric titration method.
	C02	Estimate "VITAMINE -C" .
	C03	Analyse the quality of WATER.
	C04	Measure the strength of Acid by conductometric and potentiometric titration
	C05	known the preparation of Bakelite.
C115 PYTHON PROGRAMMING LAB	C01	Develop essential programming skills in computer programming concepts like data types, containers
	C02	Apply the basics of programming in the Python language
	C03	Solve coding tasks related conditional execution, loops
	C04	Solve coding tasks related conditional execution, loops
	C05	Solve coding tasks related to the fundamental notions and techniques used in objectoriented programming
C116 DATA STRUCTURES LAB	C01	Implementation of single and double linked list
	C02	Implementation of different stack and queue by using arrays
	C03	Implementation of binary search trees, Hash Table and Heaps.
	C04	Implementation of Graph traversals (DFS and BFS), finding shortest path algorithms (prim's, Dijkstra's and kruskal's).
	C05	Implement and analyze different Sorting and Searching Techniques with their complexities.
C117 ENVIRONMENT SCIENCE	C01	Grasp multidisciplinary nature of environmental studies and various renewable and non-renewable resources.
	C02	Understand flow and bio-geo-chemical cycles and ecological pyramids. PO2, PO7
	C03	Understand various causes of pollution and solid waste management and related preventive

		measures.
	CO4	About the rainwater harvesting, watershed management, ozone layer depletion and waste land reclamation.-
	CO5	Cause of population explosion, value education and welfare programmes.

C201 MATHEMATICS III	CO1	Find the normal to the surface and evaluate divergence and curl of vector functions.
	CO2	Apply Laplace transform to solve ordinary differential equations.
	CO3	Evaluate Fourier series and Fourier transform for functions.
	CO4	Determine the solution of linear and non linear partial differential equations of first order.
	CO5	Calculate the solution of higher order linear partial differential equations.
C202 OBJECT ORIENTED PROGRAMMING THROUGH C++	CO1	Describe the procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects
	CO2	Understand dynamic memory management techniques using pointers, constructors, destructors
	CO3	Describe the concept of function overloading, operator overloading, virtual functions and polymorphism
	CO4	Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming
	CO5	Demonstrate the use of various OOPs concepts with the help of programs
C203 OPERATING SYSTEMS	CO1	Describe various generations of Operating System and functions of Operating System
	CO2	Describe the Concept of program, process and thread and analyze various CPU Scheduling Algorithms and compare their performance
	CO3	Solve Inter Process Communication problems using Mathematical Equations by various methods
	CO4	Compare various Memory Management Schemes especially paging and Segmentation in Operating System and apply various Page Replacement Techniques
	CO5	Describe the system security and system protection for all operating systems.
C204 SOFTWARE ENGINEERING	CO1	Define software engineering process and practices, and demonstrate various process models
	CO2	Apply software engineering concepts to define a problem and perform requirements engineering.
	CO3	Design UML diagrams for the requirements gathered
	CO4	Implement the designed problem in object oriented programming language
	CO5	Test whether all the requirements specified have been achieved or not

C205 MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE	C01	Apply mathematical logic and rules of inferences to check consistency of premises and reduce the given statement into normal forms
	C02	Apply theory of inference for statement calculus and predicate calculus to derive the conclusions. Know the basic concepts of sets, relations, functions, lattices and their properties.
	C03	Know the basic concepts of properties of integers and groups
	C04	Use fundamental counting principle to determine the number of outcomes.
	C05	Develop and solve the recurrence relations. Know the basic concepts of graphs and determine the minimal spanning tree for a given weighted graph
C206 OBJECT ORIENTED PROGRAMMING THROUGH C++LAB	C01	Demonstrate procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects
	C02	Understand dynamic memory management techniques using pointers, constructors, destructors, etc
	C03	Demonstrate the concept of function overloading, operator overloading, virtual functions and polymorphism, inheritance
C207 OPERATING SYSTEMS LAB	C01	Examine various process management techniques like CPU scheduling, process synchronization and deadlocks.
	C02	Prioritize various memory management techniques like page replacement algorithms
	C03	Analyze various storage management techniques like file allocation and disk scheduling.
C208 SOFTWARE ENGINEERING LAB	C01	To demonstrate requirement gathering techniques to create SRS for a defined problem.
	C02	To implement the cost, size, effort estimation techniques on a defined problem
	C03	To assess the risk for a defined problem by applying Risk Assessment strategies like RMMM.
	C04	To investigate a real-world problem using modern modelling tools
	C05	To formulate test cases based on requirements and design
	C06	To conduct FTRs as a measure of communication between him and the other stakeholders of the project
C209 WEBAPPLICATION DEVELOPMENT USING FULLSTACK- FRONTEND DEVELOPMENT -MODULE-1	C01	Analyze a web page and identify its elements and attributes.
	C02	Demonstrate the important HTML tags for designing static pages and separate design from content using Cascading Style sheet
	C03	Implement MVC and responsive design to scale well across PC, tablet and Mobile Phone
	C04	Create web pages using HTML and Cascading Style Sheets
	C01	C01: Understand historical background of the constitution making and its importance

C210 CONSTITUTION OF INDIA		for building a democratic India.
	C02	Understand the functioning of three wings of the government i.e., executive, legislative and judiciary.
	C03	Understand the value of the fundamental rights and duties for becoming good citizen of India.
	C04	Analyze the decentralization of power between central, state and local self-government.
	C05	Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
C211 PROBABILITY AND STATISTICS	C01	Analyze statical data using measure of central tendency
	C02	calculate the correlation and regression for a set of data. using least square method to fit a curve for the given data
	C03	Use discrete and continuous probability distribution to find mean, variance and standard deviation .use Binomial, Poisson distribution and normal distribution to find probabilities
	C04	Know the construction of point and interval estimators
	C05	Interpret results of analysis of variance tests
C212 DATABASE MANAGEMENT SYSTEMS	C01	Describe a relational database and object-oriented database
	C02	Create, maintain and manipulate a relational database using SQL
	C03	Describe ER model and normalization for database design
	C04	Examine issues in data storage and query processing and can formulate appropriate solutions
	C05	Outline the role and issues in management of data such as efficiency, privacy, security, ethical responsibility, and strategic advantage
C213 FORMAL LANGUAGES AND AUTOMATA THEORY	C01	Design automata for any given pattern
	C02	Specify regular expression of string pattern
	C03	Write context free grammar for any language
	C04	Design PDA for the given language
	C05	Apply Turing machine to propose computation solutions and whether problem is decidable or not
C214 JAVA PROGRAMMING	C01	Demonstrate Various Concepts of Object Oriented Programming language.
	C02	Apply principles of object oriented programming to model/design real world problems.
	C03	Develop reusable programs using arrays, inheritance, interfaces.
	C04	Utilize packages and exception handling to develop efficient and error free code.

	C05	Apply Multi-threading Programming and also JDBC for develop applications.
C215 MANAGERIAL ECONOMICS AND FINANCIAL ACCOUNTANC Y	C01	Define about Managerial Economics& different types of demand
	C02	Explain different types of Production functions & Cost Concepts
	C03	Recall the nature of Markets and different Pricing methods
	C04	Define different forms of Business phases & Cycles
	C05	Analyze the Financial position of a company by using different techniques
C216 DATABASE MANAGEMEN T SYSTEMS LAB	C01	Design and implement a databaseschema for a given problem domain.
	C02	Create and maintain tables usingPL/SQL.
	C03	Populate and Query a Database.
	C04	Prepare Reports.
	C05	Application development usingPL/SQL & front end tools.
	C06	Create and populate a RDBMS for areal life application, with constraintsand keys, using SQL.
C217 R PROGRAMMI NG LAB	C01	Apply statistics concepts and summarize the differences between proprietary software and free and open source software.
	C02	Utilize and R Data types for developing programs.
	C03	Make use of different R Data Structures.
	C04	Develop programming logic using R Packages.
	C05	Analyze the datasets using R programming capabilities.
C218 JAVA PROGRAMMI NG LAB	C01	Introduction to Java, Basic Syntax, and Data Types
	C02	Variables, Operators, Control Statements
	C03	Classes, Objects, Methods, and Constructors
	C04	Inheritance, Interfaces, and Polymorphism
	C05	Packages, Exception Handling, and Libraries
	C06	String Handling and Advanced Topics in Java
	C07	Multithreading and JDBC
C219 WEB APPLICATION DEVELOPMEN	C01	Develop the major web application tier through client-side development using JavaScript.
	C02	Participate in the active development of cross- browser applications to ensure compatibility and enhanced user experience.

T UISING FULL STACK - FRONTEND DEVELOPEMNT -MODULE-II	C03	Design and develop JavaScript applications that effectively manage transitions between states for dynamic web interactions.
C301 COMPUTER NETWORKS	C01	Utilize the network topologies for various models.
	C02	Apply different types of transmission media and techniques for error detection and correction.
	C03	Analyze MAC protocols for channel allocation.
	C04	Classify the routing and congestion control algorithms.
	C05	Design various protocols for security, Authentication and data transmission .
C302 DESIGN AND ANALYSIS OF ALGORITHMS	C01	Introduction: Algorithm Definition, Algorithm Specification, Performance Analysis, Performance Measurement, Asymptotic notations. Divide and Conquer: General Method, Binary Search, Finding the Maximum and Minimum, Quick Sort.
	C02	The Greedy Method: The General Method, Knapsack Problem, Job Sequencing with Deadlines Problem, Single Source Shortest Path Problem, Optimal Merge Patterns Problem.
	C03	Dynamic Programming: The General Method, 0/1 Knapsack Problem, Single Source Shortest Path – General Weights, All Pairs-Shortest Paths Problem, Traveling Salesperson Problem, String Editing Problem.
	C04	Backtracking: The General Method, N-Queens Problem, Sum of Subsets Problem, Graph Coloring Problem, and Hamiltonian Cycles Problem.
	C05	Branch and Bound: The General Method, FIFO Branch-and-Bound, LC Branch-and-Bound, 0/1 Knapsack Problem, Traveling Salesperson Problem
C303 DATA WAREHOUSING AND DATA MINING	C01	Illustrate the importance of Data Warehousing, Data Mining and its functionalities and Design schema for real time data warehousing applications.
	C02	Demonstrate on various Data Preprocessing Techniques viz. data cleaning, data integration, data transformation and data reduction and Process raw data to make it suitable for various data mining algorithms.
	C03	Choose appropriate classification technique to perform classification, model building and evaluation.
	C04	Make use of association rule mining techniques viz. Apriori and FP Growth algorithms and analyze on frequent item sets generation.
	C05	Identify and apply various clustering algorithm (with open source tools), interpret, evaluate and report the result.
	C01	Know the Categories and functions of various Data communication Networks

C304 Data Communicati ons	C02	Design and Analyze various error detection techniques.
	C03	Demonstrate the mechanism of routing the data in network layer
	C04	Know the significance of various Flow control and CongestionControl Mechanisms
	C05	Recognize principles of networking applications, how processescommunicate and transport services, File Transfer Protocol(FTP), Electronic Mail in the Internet (SMTP, about DNS recordsand messages
C305 Artificial Intelligence	C01	Understand the fundamental concepts in Artificial Intelligence
	C02	Analyze the applications of search strategies and problem
	C03	Apply the mathematical logic concepts.
	C04	Develop the Knowledge representations in Artificial Intelligence.
	C05	Design the Fuzzy logic expert system with its applications..
C306 DATA WARE HOUSING AND DATA MINING LAB	C01	By the end of the course student will be able to Design a data mart or data warehouse for any organization
	C02	C02: Extract knowledge using data mining techniques and enlist various algorithms used in information analysis of Data Mining Techniques
	C03	Demonstrate the working of algorithms for data mining tasks such as association rule mining, classification for realistic data
	C04	Implement and Analyze on knowledge flow application on data sets and Apply the suitable visualization techniques to output analytical results

C307 COMPUTER NETWORKS LAB	C01	Implement data link layer farming methods.
	C02	Analyze error detection and error correction codes
	C03	Implement and analyze routing and congestion issues in network design.
	C04	Implement Encoding and Decoding techniques used in presentation layer
	C05	Work with different network tools.
C308 CONTINUOUS	C01	Understand stages in software development lifecycle and agile approach
	C02	Understand extreme programming practices (test-first, refactoring)
	C03	Comprehend DevOps automation practices
	C04	Configure web application and version control using Git
	C05	Configure static code analysis tool

INTEGRATION AND CONTINUOUS DELIVERY USING DEVOPS	C06	Write build script for automation using Maven
	C07	Configure Jenkins with paths, variables, and users
	C08	Configure Jenkins pipeline for automatic execution upon code changes
	C09	Create Jenkins pipeline view and configure user-defined messages
	C10	Implement quality gates for static code analysis
	C11	Implement quality gates for unit testing
	C12	Implement quality gates for code coverage
C309 EMPLOYABILITY SKILLS-I	C01	Understanding the corporate etiquette
	C02	Make presentations effectively with appropriate body language
	C03	Be composed with positive attitude
	C04	Understand the core competencies to succeed in professional and personal life
C310 SUMMER INTERNSHIP	C01	Excellent opportunity to see how the theoretical aspects learned in classes are integrated into the practical world
	C02	Helps them decide if the industry and the profession is the best career option to pursue.
	C03	Opportunity to practice communication and teamwork skills
	C04	Creating network and social circle and developing relationships with industry people.
C311 MACHINE LEARNING	C01	Describe the fundamental usage of the concept Machine Learning system
	C02	Demonstrate and Design various classification and regression Techniques
	C03	Analyze the Ensemble Learning Methods
	C04	Illustrate the Clustering Techniques and Dimensionality Reduction Models in Machine Learning.
	C05	Design the Neural Network Models and Fundamentals concepts of Deep Learning
C312 COMPILER DESIGN	C01	Annotate Compilers, Grammars, Scanners, Types & structures of Compilers
	C02	Infer and Articulate different Parsers-can generate language & recognize it
	C03	Exemplify semantic analyzer with out the aid of automatic generators translationschemes
	C04	Outline storage allocation strategies, IR forms & Code generation form
	C05	Implement source code for an ovel language converted into machine code for an ovel computer

C313 CRYPTOGRAPHY AND NETWORK SECURITY	C01	To understand and classify various security attacks, services mechanisms and classical cryptographic techniques
	C02	Analyse the design principles of block ciphers and their implementation
	C03	To compute and analyse asymmetric key cryptographic algorithms
	C04	Evaluates Authentication, Hash Codes and verify the digital signatures
	C05	Impart the knowledge on Network security concepts
C314 BIG DATA ANALYTICS	C01	To Understand and optimize business decisions and create competitive advantage with Big Data analytics.
	C02	Understand how mining process works
	C03	Understanding the Hadoop Distributed Frame Work
	C04	Using Pig and Hive tools for extracting the unstructured data
	C05	Exploring how data can be processes and calculated using Visual Techniques.
C315 MEAN STACK DEVELOPME NT (JOB ORIENTED)	C01	Develop Static webpages using HTML5 Features
	C02	Design and develop interactive web applications by leveraging JavaScript to dynamically manipulate web content.
	C03	Ability to build efficient and scalable server-side applications using Node.js
	C04	Develop robust web applications by effectively utilizing Express.js to handle routing, middleware integration, and server-side logic.
	C05	Implement Typescript features like classes and modules,generics
C316 MACHINE LEARNING USING PYTHON LAB	C01	Understand the mathematical and statistical perspectives of machine learning algorithms through python programming.
	C02	Design and evaluate the unsupervised models through python in built functions.
	C03	Evaluate the machine learning models pre-processed through various feature engineering algorithms by python programming.
	C04	Design and apply various reinforcement algorithms to solve real time complex problems.
	C05	Understand the basic concepts of deep neural network model and design the same.
C317 COMPILER DESIGN LAB	C01	Design simple lexical analyzers
	C02	Determine predictive parsing table for a CFG
	C03	Apply Lex and Yacc tools
	C04	Design LR parser and generating SLR Parsing table

	C05	Generate Intermediate code generation for subset C language
C318 CRYPTOGRAPHY AND NETWORK SECURITY LAB	C01	Develop a code for classical encryption techniques.
	C02	Build symmetric and asymmetric algorithms.
	C03	Ability to build code for various Authentication schemes.
	C04	Apply the principles of digital signature
	C05	To analyze the concept of key exchange in public domain
C319 MEANSTACK DEVELOPMENT LAB	C01	Develop Static webpages using HTML5 Features
	C02	Design and develop interactive web applications by leveraging JavaScript to dynamically manipulate web content.
	C03	Ability to build efficient and scalable server-side applications using Node.js
	C04	Develop robust web applications by effectively utilizing Express.js to handle routing, middleware integration, and server-side logic.
	C05	Implement Typescript features like classes and modules, generics
C320 EMPLOYABILITY SKILLS-II	C01	Solve various Basic Mathematics problems by following different methods
	C02	Follow strategies in minimizing time consumption in problem solving Apply shortcut methods to solve problems
	C03	Confidently solve any mathematical problems and utilize these mathematical skills both in their professional as well as personal life.
	C04	Analyze, summarize and present information in quantitative forms including table, graphs and formulas
	C05	Analyzing the data interpretation
C401 CLOUD COMPUTING	C01	Analyze the key dimensions of the challenge of Cloud Computing
	C02	Classify the Levels of Virtualization and mechanism of tools.
	C03	Design and deploy applications using cloud computing service models on public cloud platforms, such as Amazon AWS and Microsoft Azure.
	C04	Analyze and implement effective resource management and scheduling policies in cloud computing environments
	C05	Assess control storage systems and cloud security, the risks involved its impact and develop cloud application
C402 DEEP LEARNING	C01	Analyze the key parameters and hyper-parameters in neural network architecture.
	C02	Design and build types of Neural Networks in deep learning.
	C03	Analyze different optimizers in neural networks.

	C04	Design and Build recent trends and applications in deep learning architecture like Image Denoising, Semantic Segmentation, Object Detection etc.
	C05	Design Advanced research and development in deep learning: LSTM, Autoencoders and GAN.
C403 ETHICAL HACKING	C01	Understand the concepts related to hacking, ports and protocols, pen testing and virtualization
	C02	Determine the applicable footprinting techniques and scanning methods
	C03	Analyse the process of system hacking and Analyse the concepts Trojans, backdoors, worms and virus and its countermeasures
	C04	Analyse systematic understanding of the concepts of Sniffing and Social Engineering and its attacks
	C05	Determine the applicable methods of cryptography, steganography and Vulnerability Assessment
C404 MICROPROCESSOR & MICROCONTROLLER	C01	Apply the concepts of buses to discriminate the architectural view of Microprocessors and Microcontrollers
	C02	Illustrate various addressing modes and instruction sets of Microprocessors and Microcontrollers to develop Assembly language programs
	C03	Analyze different programmable interfacing modules to interface with microprocessors and controllers for real time applications.
	C04	Develop a report to generate a code for applications using microprocessors and microcontrollers to meet the societal requirements.
C405 DLD	C01	Illustrate the importance of various number systems and to perform different arithmetic operations on them.
	C02	Apply Boolean algebra postulates-map and tabulation methods to minimize Boolean functions
	C03	Illustrate various combinational and sequential circuits used in digital systems.
	C04	Design various PLDs such as ROMs, PALs, PLAs and PROMs
	C05	Analyze different finite state machines using Mealy Moore machines.
C406 UNIVERSAL HUMAN VALUES	C01	Understand and analyse the essentials of human values and skills, self exploration, happiness and prosperity.
	C02	Evaluate coexistence of the "I" with the body.
	C03	Identify and evaluate the role of harmony in family, society, and universal order.
	C04	Understand and associate the holistic perception of harmony at all levels of existence.

UNDERSTANDING HARMONY	C05	Develop appropriate technologies and management patterns to create harmony in professional and personal lives.
C407 SO LAB (MSD)	C01	Develop Static webpages using HTML5 Features
	C02	Design and develop interactive web applications by leveraging JavaScript to dynamically manipulate web content.
	C03	Ability to build efficient and scalable server-side applications using Node.js
	C04	Develop robust web applications by effectively utilizing Express.js routing, middleware integration, and server-side logic.
	C05	Implement Typescript features like classes and modules, generics
C408 INTERNSHIP	C01	Excellent opportunity to see how the theoretical aspects learned in classes are integrated into the practical world
	C02	Helps them decide if the industry and the profession is the best career option to pursue.
	C03	Opportunity to practice communication and teamwork skills
	C04	Creating network and social circle and developing relationships with industry people.
C409 PROJECT	C01	Implement and Develop the Solution Based on the Conceptual Design from Project-I
	C02	Integrate and Test the Components to Develop a Fully Functional System
	C03	Conduct System Validation and Performance Analysis
	C04	Optimize the System for Power, Performance, and Cost
	C05	Communicate the Results Effectively through Documentation and Presentation

Coordinator

HOD

Principal