

Batch 2022-2026

Semester No:	1		
Course Title:	MA3151 Matrices and Calculus	Course Code:	C102
Course Outcome No.	Course Outcome Statement		
CO1	Use the matrix algebra methods for solving practical problems.		
CO2	Apply differential calculus tools in solving various application problems.		
CO3	Able to use differential calculus ideas on several variable functions.		
CO4	Apply different methods of integration in solving practical problems.		
CO5	Apply multiple integral ideas in solving areas, volumes and other practical problems.		

Semester No:	1		
Course Title:	HS3152 Professional English – I	Course Code:	C101
Course Outcome No.	Course Outcome Statement		
CO1	To use appropriate words in a professional context		
CO2	To gain understanding of basic grammatic structures and use them in right context.		
CO3	To read and infer the denotative and connotative meanings of technical texts		
CO4	To write definitions, descriptions, narrations and essays on various topicsfinite sets to model input-output relationships in computer science problems.		
CO5	Differentiate between content and function words and analyze their roles in expressing cause-effect relationships.		

Semester No:	1		
Course Title:	PH3151 Engineering Physics	Course Code:	C103
Course Outcome No.	Course Outcome Statement		
CO1	Understand the importance of mechanics.		
CO2	Express their knowledge in electromagnetic waves.		
CO3	Demonstrate a strong foundational knowledge in oscillations, optics and lasers.		
CO4	Understand the importance of quantum physics.		
CO5	Comprehend and apply quantum mechanical principles towards the formation of energy bands.		

Semester No:	1		
Course Title:	CY3151 Engineering Chemistry	Course Code:	C104
Course Outcome No.	Course Outcome Statement		
CO1	To infer the quality of water from quality parameter data and propose suitable treatment methodologies to treat water.		
CO2	To identify and apply basic concepts of nanoscience and nanotechnology in designing the synthesis of nanomaterials for engineering and technology applications.		
CO3	To apply the knowledge of phase rule and composites for material selection requirements.		
CO4	To recommend suitable fuels for engineering processes and applications.		
CO5	To recognize different forms of energy resources and apply them for suitable applications in energy sectors.		

Semester No:	1		
Course Title:	GE3151 Problem Solving and Python Programming	Course Code:	C105
Course Outcome No.	Course Outcome Statement		
CO1	Develop algorithmic solutions to simple computational problems.		
CO2	Develop and execute simple Python programs.		
CO3	Write simple Python programs using conditionals and loops for solving problems.		
CO4	Decompose a Python program into functions.		
CO5	Develop the ability to represent and manage compound data in Python using lists, tuples, dictionaries, and other data structures, and apply these structures to efficiently read from and write data to files in Python programs		

Semester No:	1		
Course Title:	GE3171 Problem Solving and Python Programming Laboratory	Course Code:	C107
Course Outcome No.	Course Outcome Statement		
CO1	Develop algorithmic solutions to simple computational problems		
CO2	Develop and execute simple Python programs.		
CO3	Implement programs in Python using conditionals and loops for solving problems.		
CO4	Deploy functions to decompose a Python program.		
CO5	Use Python data structures and packages to handle data and build applications.		

Semester No:	1		
Course Title:	BS3171 Physics and Chemistry Laboratory	Course Code:	C108
Course Outcome No.	Course Outcome Statement		
CO1	Understand the functioning of various physics laboratory equipment.		
CO2	Use graphical models to analyze laboratory data.		
CO3	Use mathematical models as a medium for quantitative reasoning and describing physical reality.		
CO4	Access, process and analyze scientific information.		
CO5	Solve problems individually and collaboratively.		

Semester No:	1		
Course Title:	GE3172 English Laboratory	Course Code:	C109
Course Outcome No.	Course Outcome Statement		
CO1	To listen to and comprehend general as well as complex academic information		
CO2	To listen to and understand different points of view in a discussion		
CO3	To speak fluently and accurately in formal and informal communicative contexts		
CO4	To describe products and processes and explain their uses and purposes clearly and accurately		
CO5	To express their opinions effectively in both formal and informal discussions		

Semester No:	2		
Course Title:	HS3252 Professional English - II	Course Code:	C110
Course Outcome No.	Course Outcome Statement		
CO1	To compare and contrast products and ideas in technical texts.		
CO2	To identify and report cause and effects in events, industrial processes through technical texts		
CO3	To analyse problems in order to arrive at feasible solutions and communicate them in the written format.		
CO4	To present their ideas and opinions in a planned and logical manner		
CO5	To draft effective resumes in the context of job search.		

Semester No:	2		
Course Title:	MA3251 Statistics and Numerical Methods	Course Code:	C111
Course Outcome No.	Course Outcome Statement		
CO1	Apply the concept of testing of hypothesis for small and large samples in real life problems.		
CO2	Apply the basic concepts of classifications of design of experiments in the field of agriculture.		
CO3	Appreciate the numerical techniques of interpolation in various intervals and apply the numerical techniques of differentiation and integration for engineering problems.		
CO4	Understand the knowledge of various techniques and methods for solving first and second order ordinary differential equations.		
CO5	Solve the partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.		

Semester No:	2		
Course Title:	PH3256 Physics for Information Science	Course Code:	C112
Course Outcome No.	Course Outcome Statement		
CO1	Gain knowledge on classical and quantum electron theories, and energy band structures		
CO2	Acquire knowledge on basics of semiconductor physics and its applications in various devices		
CO3	Get knowledge on magnetic properties of materials and their applications in data storage,		
CO4	Have the necessary understanding on the functioning of optical materials for optoelectronics		
CO5	Understand the basics of quantum structures and their applications and basics of quantum computing.		

Semester No:	2		
Course Title:	BE3251 Basic Electrical and Electronics Engineering	Course Code:	C113
Course Outcome No.	Course Outcome Statement		
CO1	Compute the electric circuit parameters for simple problems		
CO2	Explain the working principle and applications of electrical machines		
CO3	Analyze the characteristics of analog electronic devices		
CO4	Explain the basic concepts of digital electronics		
CO5	Explain the operating principles of measuring instruments		

Semester No:	2		
Course Title:	GE3251 Engineering Graphics	Course Code:	C114
Course Outcome No.	Course Outcome Statement		
CO1	Use BIS conventions and specifications for engineering drawing.		
CO2	Construct the conic curves, involutes and cycloid.		
CO3	Solve practical problems involving projection of lines.		
CO4	Draw the orthographic, isometric and perspective projections of simple solids.		
CO5	Draw the development of simple solids.		

Semester No:	2		
Course Title:	CS3251 Programming in C	Course Code:	C115
Course Outcome No.	Course Outcome Statement		
CO1	Demonstrate knowledge on C Programming constructs		
CO2	Develop simple applications in C using basic constructs		
CO3	Design and implement applications using arrays and strings		
CO4	Develop and implement modular applications in C using functions.		
CO5	Develop applications in C using structures, pointers, and file processing with sequential and random access.		

Semester No:	2		
Course Title:	GE3271 Engineering Practices Laboratory	Course Code:	C117
Course Outcome No.	Course Outcome Statement		
CO1	Draw pipe line plan; lay and connect various pipe fittings used in common household plumbing work; Saw; plan; make joints in wood materials used in common household wood work.		
CO2	Wire various electrical joints in common household electrical wire work.		
CO3	Weld various joints in steel plates using arc welding work; Machine various simple processes like turning, drilling, tapping in parts; Assemble simple mechanical assembly of common household equipments; Make a tray out of metal sheet using sheet metal work.		
CO4	Solder and test simple electronic circuits		
CO5	Assemble and test simple electronic components on a printed circuit board (PCB).		

Semester No:	2		
Course Title:	CS3271 Programming in C Laboratory	Course Code:	C118
Course Outcome No.	Course Outcome Statement		
CO1	Demonstrate knowledge on C programming constructs.		
CO2	Develop programs in C using basic constructs.		
CO3	Develop programs in C using arrays.		
CO4	Develop applications in C using strings, pointers, functions.		
CO5	Develop C applications using structures and file processing.		

Semester No:	2		
Course Title:	GE3272 Communication Laboratory	Course Code:	C119
Course Outcome No.	Course Outcome Statement		
CO1	Demonstrate knowledge on C programming constructs.		
CO2	Develop programs in C using basic constructs.		
CO3	Develop programs in C using arrays.		
CO4	Develop applications in C using strings, pointers, functions.		
CO5	Develop C applications using structures and file processing.		

Semester No:	3		
Course Title:	MA3354 Discrete Mathematics	Course Code:	C201
Course Outcome No.	Course Outcome Statement		
CO1	Have knowledge of the concepts needed to test the logic of a program.		
CO2	Have an understanding in identifying structures on many levels.		
CO3	Be aware of a class of functions which transform a finite set into another finite set which relates to input and output functions in computer science.		
CO4	Be aware of the counting principles.		
CO5	Be exposed to concepts and properties of algebraic structures such as groups, rings and fields.		

Semester No:	3		
Course Title:	CS3351 Digital Principles and Computer Organization	Course Code:	C202
Course Outcome No.	Course Outcome Statement		
CO1	Design various combinational digital circuits using logic gates		
CO2	Design sequential circuits and analyze the design procedures		
CO3	State the fundamentals of computer systems and analyze the execution of an instruction		
CO4	Analyze different types of control design and identify hazards		

Semester No:	3		
Course Title:	CS3352 Foundation of Data Science	Course Code:	C203
Course Outcome No.	Course Outcome Statement		
CO1	Define the data science process		
CO2	Understand different types of data description for data science process		
CO3	Gain knowledge on relationships between data		
CO4	Use the Python Libraries for Data Wrangling		
CO5	Apply visualization Libraries in Python to interpret and explore data		

Semester No:	3		
Course Title:	CD3291 Data Structures and Algorithm	Course Code:	C204
Course Outcome No.	Course Outcome Statement		
CO1	Apply the concepts of abstract datatypes.		
CO2	Design, implement, and analyze linear data structures, such as lists, queues, and stacks, according to the needs of different applications		
CO3	Design, implement, and analyze efficient tree structures to meet requirements such as searching, indexing, and sorting		
CO4	Model problems as graph problems and implement efficient graph algorithms to solve them		
CO5	Analyze real-world problems to model them as graph problems for effective solution design.		

Semester No:	3		
Course Title:	CS3391 Object Oriented Programming	Course Code:	C205
Course Outcome No.	Course Outcome Statement		
CO1	Apply the concepts of classes and objects to solve simple problems.		
CO2	Develop programs using inheritance, packages and interfaces		
CO3	Make use of exception handling mechanisms and multithreaded model to solve real world problems		
CO4	Build Java applications with I/O packages, string classes, Collections and generics concepts		
CO5	Integrate the concepts of event handling and JavaFX components and controls for developing GUI based applications		

Semester No:	3		
Course Title:	CD3281 Data Structures and Algorithms Laboratory	Course Code:	C206
Course Outcome No.	Course Outcome Statement		
CO1	Implement ADTs as Python classes		
CO2	Design, implement, and analyse linear data structures, such as lists, queues, and stacks, according to the needs of different applications		
CO3	Design, implement, and analyse efficient tree structures to meet requirements such as searching, indexing, and sorting		
CO4	Model problems as graph problems and implement efficient graph algorithms to solve them		
CO5	Analyze the structure of a problem to determine an appropriate graph model and evaluate the performance of corresponding algorithms.		

Semester No:	3		
Course Title:	CS3381 Object Oriented Programming Laboratory	Course Code:	C207
Course Outcome No.	Course Outcome Statement		
CO1	Design and develop java programs using object oriented programming concepts		
CO2	Develop simple applications using object oriented concepts such as package, exceptions		
CO3	Implement multithreading, and generics concepts		
CO4	Create GUIs and event driven programming applications for real world problems		
CO5	Implement and deploy web applications using Java		

Semester No:	3		
Course Title:	CS3361 Data Science Laboratory	Course Code:	C208
Course Outcome No.	Course Outcome Statement		
CO1	Make use of the python libraries for data science		
CO2	Make use of the basic Statistical and Probability measures for data science.		
CO3	Perform descriptive analytics on the benchmark data sets.		
CO4	Perform correlation and regression analytics on standard data sets		
CO5	Present and interpret data using visualization packages in Python.		

Semester No:	3		
Course Title:	GE3361 Professional Development	Course Code:	C209
Course Outcome No.	Course Outcome Statement		
CO1	Use MS Word to create quality documents, by structuring and organizing content for their day to day technical and academic requirements		
CO2	Use MS EXCEL to perform data operations and analytics, record, retrieve data as per requirements and visualize data for ease of understanding		
CO3	Use MS PowerPoint to create high quality academic presentations by including common tables, charts, graphs, interlinking other elements, and using media objects.		
CO4	Record, retrieve, and manage datasets effectively using features like sorting, filtering, and data validation, and visualize key findings using appropriate chart types and conditional formatting.		
CO5	Use MS PowerPoint to create high quality academic presentations by including common tables, charts, graphs, interlinking other elements, and using media objects.		

Semester No:	4		
Course Title:	CS3452 Theory of Computation	Course Code:	C210
Course Outcome No.	Course Outcome Statement		
CO1	Construct automata theory using Finite Automata		
CO2	Write regular expressions for any pattern		
CO3	Design context free grammar and Pushdown Automata		
CO4	Design Turing machine for computational functions		
CO5	Differentiate between decidable and undecidable problems		

Semester No:	4		
Course Title:	CS3491 Artificial Intelligence and Machine Learning	Course Code:	C211
Course Outcome No.	Course Outcome Statement		
CO1	Use appropriate search algorithms for problem solving		
CO2	Apply reasoning under uncertainty.		
CO3	Build supervised learning models		
CO4	Build ensembling and unsupervised models		
CO5	Build deep learning neural network models		

Semester No:	4		
Course Title:	CS3492 Database Management Systems	Course Code:	C212
Course Outcome No.	Course Outcome Statement		
CO1	Construct SQL Queries using relational algebra.		
CO2	Design database using ER model and normalize the database		
CO3	Construct queries to handle transaction processing and maintain consistency of the database		
CO4	Compare and contrast various indexing strategies and apply the knowledge to tune the performance of the database		
CO5	Analyze distributed and NoSQL database architectures, processing techniques, and database security mechanisms including access control, encryption, and security challenges.		

Semester No:	4		
Course Title:	IT3401 Web Essentials	Course Code:	C213
Course Outcome No.	Course Outcome Statement		
CO1	Apply JavaScript, HTML and CSS effectively to create interactive and dynamic websites.		
CO2	Create simple PHP scripts		
CO3	Design and deploy simple web-applications.		
CO4	Create simple database applications.		
CO5	Handle multimedia components		

Semester No:	4		
Course Title:	CS3451 Introduction to Operating System	Course Code:	C214
Course Outcome No.	Course Outcome Statement		
CO1	Analyze various scheduling algorithms and process synchronization.		
CO2	Explain deadlock prevention and avoidance algorithms.		
CO3	Compare and contrast various memory management schemes.		
CO4	Explain the functionality of file systems, I/O systems, and Virtualization		
CO5	Compare iOS and Android Operating Systems.		

Semester No:	4		
Course Title:	GE3451& Environment Science and Sustainability	Course Code:	C215
Course Outcome No.	Course Outcome Statement		
CO1	To recognize and understand the functions of environment, ecosystems and biodiversity and their conservation.		
CO2	To identify the causes, effects of environmental pollution and natural disasters and contribute to the preventive measures in the society.		
CO3	To identify and apply the understanding of renewable and non-renewable resources and contribute to the sustainable measures to preserve them for future generations.		
CO4	To recognize the different goals of sustainable development and apply them for suitable technological advancement and societal development.		
CO5	To demonstrate the knowledge of sustainability practices and identify green materials, energy cycles and the role of sustainable urbanization.		

Semester No:	4		
Course Title:	CS3461- Operating System Laboratory	Course Code:	C216
Course Outcome No.	Course Outcome Statement		
CO1	Define and implement UNIX Commands.		
CO2	Compare the performance of various CPU Scheduling Algorithms.		
CO3	Compare and contrast various Memory Allocation Methods.		
CO4	Define File Organization and File Allocation Strategies.		
CO5	Implement various Disk Scheduling Algorithms..		

Semester No:	4		
Course Title:	CS3481 – Database Management Systems Laboratory	Course Code:	C217
Course Outcome No.	Course Outcome Statement		
CO1	Create databases with different types of key constraints.		
CO2	Construct simple and complex SQL queries using DML and DCL commands.		
CO3	Use advanced features such as stored procedures and triggers and incorporate in GUI based application development.		
CO4	Create an XML database and validate with meta-data (XML schema).		
CO5	Create and manipulate data using NOSQL database.		

Semester No:	4		
Course Title:	NM1022 Experience Based Project Learning	Course Code:	C218
Course Outcome No.	Course Outcome Statement		
CO1	Analyze real-world problems and formulate appropriate project objectives		
CO2	Apply relevant knowledge, tools and technologies to develop practical solutions.		
CO3	Implement, test and evaluate project solutions using suitable methodologies.		
CO4	Demonstrate teamwork, leadership and project management skills during project execution.		
CO5	Communicate project outcomes effectively through documentation, presentation and demonstration.		

Semester No:	5		
Course Title:	CS3591 & Computer Networks	Course Code:	C301
Course Outcome No.	Course Outcome Statement		
CO1	Explain the basic layers and its functions in computer networks.		
CO2	Understand the basics of how data flows from one node to another.		
CO3	Analyze routing algorithms.		
CO4	Describe protocols for various functions in the network.		
CO5	Analyze the working of various application layer protocols.		

Semester No:	5		
Course Title:	IT3501 & Full Stack Web Development	Course Code:	C302
Course Outcome No.	Course Outcome Statement		
CO1	Analyze the fundamentals of full stack web development and its core technologies.		
CO2	Create applications with Node.js.		
CO3	Develop applications with MongoDB.		
CO4	Utilize the features of Angular and Express.		
CO5	Develop React applications.		

Semester No:	5		
Course Title:	CS3551 Distributed Computing	Course Code:	C303
Course Outcome No.	Course Outcome Statement		
CO1	Explain the foundations of distributed systems		
CO2	Solve synchronization and state consistency problems		
CO3	Use resource sharing techniques in distributed systems		
CO4	Apply working model of consensus and reliability of distributed systems		
CO5	Explain the fundamentals of cloud computing		

Semester No:	5		
Course Title:	CS3691 & Embedded Systems and IoT	Course Code:	C304
Course Outcome No.	Course Outcome Statement		
CO1	Explain the architecture of embedded processors.		
CO2	Write embedded C programs.		
CO3	Design simple embedded applications.		
CO4	Compare the communication models in IOT		
CO5	Design IoT applications using Arduino/Raspberry Pi /open platform.		

Semester No:	5		
Course Title:	CCW331 & Business Analytics	Course Code:	C305
Course Outcome No.	Course Outcome Statement		
CO1	Explain the real world business problems and model with analytical solutions..		
CO2	Identify the business processes for extracting Business Intelligence.		
CO3	Apply predictive analytics for business fore-casting		
CO4	Apply analytics for supply chain and logistics management		

Semester No:	5		
Course Title:	CCS336 & Cloud Service Management	Course Code:	C306
Course Outcome No.	Course Outcome Statement		
CO1	Exhibit cloud-design skills to build and automate business solutions using cloud technologies.		
CO2	Possess Strong theoretical foundation leading to excellence and excitement towards adoption of cloud-based services		
CO3	Solve the real world problems using Cloud services and technologies		
CO4	Determine appropriate cloud infrastructure setups for designing and running services in business environments.		
CO5	Analyze the benefits of cloud-based services and evaluate strategies to drive their adoption for solving real-world problems.		

Semester No:	5		
Course Title:	MX3084 Disaster Risk Reduction and Management	Course Code:	C307
Course Outcome No.	Course Outcome Statement		
CO1	Explain the concepts of disaster, vulnerability, and disaster risk reduction (DRR) to establish a foundational understanding of disaster management.		
CO2	understanding on Hazards, Vulnerability and Disaster Risk Assessment prevention and risk reduction		
CO3	Apply relevant tools and technologies to develop effective disaster response skills.		
CO4	Evaluate institutional frameworks and processes for disaster response at the national and local levels.		
CO5	Develop rudimentary ability to respond to their surroundings with potential Disaster response in areas where they live, with due sensitivity		

Semester No:	5		
Course Title:	IT3511 & Full Stack Web Development Laboratory	Course Code:	C308
Course Outcome No.	Course Outcome Statement		
CO1	Design full stack applications with clear understanding of user interface, business logic and data storage.		
CO2	Design and develop user interface screens		
CO3	Implement the functional requirements using appropriate tool		
CO4	Design and develop database based on the requirements		
CO5	Integrate all the necessary components of the application		

Semester No:	5		
Course Title:	NM1062 Full Stack Development with Java	Course Code:	C309
Course Outcome No.	Course Outcome Statement		
CO1	Explain the fundamentals of Java, object-oriented programming, and full-stack web development.		
CO2	Apply Java and web technologies to develop interactive full-stack applications.		
CO3	Develop database-driven applications using Java and appropriate database technologies.		
CO4	Analyze requirements and design suitable client-side, server-side, and database components for web applications.		
CO5	Develop and evaluate secure, scalable, and maintainable full-stack applications using appropriate Java frameworks and tools.		

Semester No:	6		
Course Title:	CCS356- Object Oriented Software Engineering	Course Code:	C310
Course Outcome No.	Course Outcome Statement		
CO1	Compare various Software Development Lifecycle Models		
CO2	Evaluate project management approaches as well as cost and schedule estimation strategies.		
CO3	Perform formal analysis on specifications.		
CO4	Use UML diagrams for analysis and design.		
CO5	Architect and design using architectural styles and design patterns, and test the system		

Semester No:	6		
Course Title:	OCE351- Environment And Social Impact Assessment	Course Code:	C311
Course Outcome No.	Course Outcome Statement		
CO1	Carry out scoping and screening of developmental projects for environmental and social assessments		
CO2	Explain different methodologies for environmental impact prediction and assessment		
CO3	Plan Environmental Impact Assessments And Environmental Management Plans		
CO4	Evaluate Environmental Impact Assessment Reports		
CO5	Evaluate project scope to identify potential challenges and impacts in infrastructure projects.		

Semester No:	6		
Course Title:	CCS335-Cloud Computing	Course Code:	C312
Course Outcome No.	Course Outcome Statement		
CO1	Analyze the design challenges in the cloud.		
CO2	Apply the concept of virtualization and its types.		
CO3	Experiment with virtualization of hardware resources and Docker.		
CO4	Develop and deploy services on the cloud and set up a cloud environment.		
CO5	Outline security challenges in the cloud environment		

Semester No:	6		
Course Title:	CCS354-Network Security	Course Code:	C313
Course Outcome No.	Course Outcome Statement		
CO1	Classify the encryption techniques		
CO2	Illustrate the key management technique and authentication.		
CO3	Evaluate the security techniques applied to network and transport layer		
CO4	Discuss the application layer security standards.		
CO5	Apply security practices for real time applications.		

Semester No:	6		
Course Title:	CCS340-Cyber Security	Course Code:	C314
Course Outcome No.	Course Outcome Statement		
CO1	Explain the basics of cyber security, cyber crime and cyber law.		
CO2	Classify various types of attacks and learn the tools to launch the attacks		
CO3	Apply various tools to perform information gathering		
CO4	Apply intrusion techniques to detect intrusion		
CO5	Apply intrusion prevention techniques to prevent intrusion		

Semester No:	6		
Course Title:	MX3089-Industrial Safety	Course Code:	C315
Course Outcome No.	Course Outcome Statement		
CO1	Explain the fundamental concepts of safety and its importance in the workplace.		
CO2	Identify key statutory regulations and safety standards applicable to occupational environments.		
CO3	Apply standard safety practices and explain the roles and responsibilities in maintaining occupational safety		
CO4	Analyze the impacts of occupational exposures and propose suitable control measures and remedies to mitigate risks.		
CO5	Evaluate various risk assessment techniques to identify potential hazards and make informed safety decisions.		

Semester No:	6		
Course Title:	IT3681 & Mobile Application And Development Laboratory	Course Code:	C316
Course Outcome No.	Course Outcome Statement		
CO1	Identify tools and languages used to create multi-platform mobile apps.		
CO2	Explain common programming techniques and design patterns used in mobile application development..		
CO3	Construct mobile apps in real-time scenarios for solving social or environmental problems.		
CO4	Develop mobile applications with gaming and multimedia features		
CO5	Analyze the integration of AI technologies in mobile applications addressing societal or environmental issues.		

Semester No:	6		
Course Title:	NM1067 AI and Green Skills	Course Code:	C317
Course Outcome No.	Course Outcome Statement		
CO1	Understand the fundamental concepts, techniques, and applications of Artificial Intelligence and their role in solving real-world problems.		
CO2	Apply AI algorithms and computational tools to analyze data and develop solutions for real-world applications.		
CO3	Analyze AI-based solutions with respect to accuracy, efficiency, ethical considerations, and their impact on society and the environment.		
CO4	Apply green computing principles and sustainable technologies to minimize energy consumption, resource utilization, and environmental impact.		
CO5	Develop AI-enabled and sustainable solutions by integrating emerging technologies, responsible AI practices, and green skills for professional and societal needs.		

Semester No:	7		
Course Title:	GE3791 - Human Values And Ethics	Course Code:	C401
Course Outcome No.	Course Outcome Statement		
CO1	Recall the importance of democratic, secular, and scientific values in maintaining social harmony		
CO2	Explain the importance of democratic and scientific values in personal and professional life.		
CO3	Apply critical thinking to develop practical solutions for social issues.		
CO4	Evaluate the effectiveness and impact of ethical behavior on society.		
CO5	Analyze critical thinking and the pursuit of truth.		

Semester No:	7		
Course Title:	GE3751 & Principles Of Management	Course Code:	C402
Course Outcome No.	Course Outcome Statement		
CO1	Recognize the roles of planning, organizing, staffing, leading, and controlling in managerial contexts.		
CO2	Describe key concepts related to managing in a global business environment.		
CO3	Construct an organizational plan based on management principles.		
CO4	Apply the concept of directing to manage and guide teams effectively		
CO5	Analyze the components and processes involved in the management function of controlling.		

Semester No:	7		
Course Title:	AI3021 - IT In Agricultural System	Course Code:	C403
Course Outcome No.	Course Outcome Statement		
CO1	Recall the applications of IT in remote sensing technologies such as drones.		
CO2	Interpret the benefits of automation in greenhouse management.		
CO3	Apply IT principles and concepts for management of field operations.		
CO4	Examine about weather models, their inputs and applications.		
CO5	Evaluate the impact of IT-driven e-governance on agricultural productivity and farmer welfare.		

Semester No:	7		
Course Title:	OIM351 Industrial Management	Course Code:	C404
Course Outcome No.	Course Outcome Statement		
CO1	Understand the basic concepts of industrial management.		
CO2	Identify the group conflicts and its causes.		
CO3	Perform swot analysis.		
CO4	Analyze the learning curves.		
CO5	Understand the placement and performance appraisal.		

Semester No:	7		
Course Title:	OIE353 Operations Management	Course Code:	C405
Course Outcome No.	Course Outcome Statement		
CO1	The students will appreciate the role of Production and Operations management in enabling and enhancing a firm's competitive advantages in the dynamic business		
CO2	The students will obtain sufficient knowledge and skills to forecast demand for Production and Service Systems.		
CO3	The students will able to Formulate and Assess Aggregate Planning strategies and Material Requirement Plan.		
CO4	The students will be able to develop analytical skills to calculate capacity requirements and developing capacity alternatives.		
CO5	The students will be able to apply scheduling and Lean Concepts for improving System Performance		

Semester No:	7		
Course Title:	IT3711 & Summer Intership	Course Code:	C406
Course Outcome No.	Course Outcome Statement		
CO1	Industry Practices, Processes, Techniques, technology, automation and other core aspects of software industry.		
CO2	Analyze, Design solution to complex business problems.		
CO3	Build and deploy solutions for target platform.		
CO4	Prepare clear, structured, and professional technical reports.		
CO5	Deliver effective oral presentations using appropriate visual aids and communication techniques.		

Semester No:	8		
Course Title:	IT3811 - Project Work	Course Code:	C407
Course Outcome No.	Course Outcome Statement		
CO1	Gain Domain knowledge and technical skill set required for solving industry/research problems.		
CO2	Provide solution architecture, modul elevel designs, algorithms.		
CO3	Implement, test and deploy the solution for the target platform.		
CO4	Prepare detailed technical report		
CO5	Demonstrate and present the work.		