## **DEPARTMENT OF INFORMATION TECHNOLOGY**

### 3.1.1 COURSE OUTCOME

## **REGULATION 2021**

After successful completion of the course, student will be able to

Course Name: C101 Year Of Study: 2021-2022 Semester: I

Subject Code/Subject Name: - PROFESSIONAL ENGLISH I

СО	STATEMENT
C101.1	Write Essays, E-Mails, and Letters efficient way.
C101.2	Analyze the Events, Reports, Articles and Blogs through Comprehension.
C101.3	Analyze the Process and Products through Technical Texts
C101.4	Write Recommendations and Transcoding from Non - Verbal to Verbal.
C101.5	Analyze the Vocabulary of various forms.

Course Name: C102 Year of Study: 2021-2022 Semester: I

Subject Code & Subject Name: MA3151- MATRICES AND CALCULUS

CO	STATEMENT
C102.1	Apply Cayley- Hamilton theorem and orthogonal transformation for different process of matrices.
C102.2	Analyze the types of functions and differentiation rules for real life engineering problems.
C102.3	Apply the concepts of partial derivatives and total derivatives in Taylor's series, Jacobians and maxima and minima of functions.
C102.4	Apply the rule of integration in various functions.
C102.5	Evaluate the double and triple integrals for finding area and volume of differentplane surfaces.

Course Name: C103 Year Of Study: 2021-2022 Semester: I

Subject Code/Subject Name: PH3151- ENGINEERING PHYSICS

CO	STATEMENT
C103.1	Explain the basic concepts of mechanics.
C103.2	Describe wave equations of electromagnetic waves with its applications.
C103.3	Explain the concept of oscillations, LASERs and Fibre optics
C103.4	Comprehend the importance of quantum mechanics.
C103.5	Apply quantum mechanical principle towards the formation of energy bands

Course Name: C104 Year of Study: 2021-2022 Semester: I

Subject Code & Subject Name: CY3151- ENGINEERING CHEMISTRY

CO	STATEMENT
C104.1	Summarize the methods to produce soft water for industrial use and potable waterat cheaper cost
C104.2	Apply basic concepts of nanoscience and nanotechnology in designing the synthesis ofnanomaterials for engineering and technology applications
C104.3	Apply the knowledge of phase rule and composites for material selection requirements
C104.4	Describe the various types of fuels and the manufacture of solid, liquid and gaseousfuel to meet environmental sustainability
C104.5	Explain the principles and generation of energy in nuclear reactor, wind energy and solar energy and batteries

Course Name: C105 Year Of Study: 2021-2022 Semester: I

Subject Code/Subject Name: GE3151- PROBLEM SOLVING AND PYTHON PROGRAMMING

СО	STATEMENT
C105.1	Solve simple computational problems using Notations.
C105.2	Write Python Programs using statements and Expressions
C105.3	Apply Control flow and Functional concepts in a user defined problems.
C105.4	Apply Python Data Structures Compound Data. List, Tuples and Dictionaries forCompound Data.
C105.5	Describe File handling and Exceptional Handling in Python for Solving Problems.

Course Name: C106 Year of Study: 2021-2022 Semester: I

**Subject Code & Subject Name:** GE3152- HERITAGE OF TAMILS

СО	STATEMENT
C106.1	Summarize about languages, literatures and scripts.
C106.2	Explain middle stone, modern sculptures, panchalogaidols and musical instruments.
C106.3	Explain about the folk gods, arts and heroic sports.
C106.4	Summarize the political theories of tamils.
C106.5	Summarize Indian national movement contribution of Tamils to Indian culture.

Course Name: C107 Year Of Study: 2021-2022 Semester: I

Subject Code/Subject Name: GE3171- PROBLEM SOLVING AND PYTHON PROGRAMMING

LABORATORY

СО	STATEMENT
C107.1	Write a python programs for simple computational problems.
C107.2	Write python programs with conditionals and loops.
C107.3	Write a python programs step-wise by defining function and calling them.
C107.4	Write a python programs using lists, tuples, and dictionaries for representing compound data.
C107.5	Write a python program for read and write data from to files in python.

Course Name: C108 Year of Study: 2021-2022 Semester: I

Subject Code & Subject Name: BS3171- PHYSICS AND CHEMISTRY LABORATORY

СО	STATEMENT
C108.1	Calculate the Young's modulus by non-uniform bending, simple harmonic oscillators by Torsion Pendulum.
C108.2	Calculate the thickness of a thin wire by air wedge and velocity of sound, compressibility of liquid using ultra sonic interferometer.
C108.3	Calculate the wavelength, acceptance angle and numerical aperture using laser.
C108.4	Estimate the amount of Hardness, chloride, alkalinity in water samples.
C108.5	Estimate the amount of acid, iron content present in a given solution by using pH, conductivity and potentiometric titration.

Course Name: C109 Year Of Study: 2021-2022 Semester: I

Subject Code/Subject Name: GE3172- ENGLISH LABORATORY

СО	STATEMENT
C109.1	Analyze general information as well as complex academic situations.
C109.2	Describe their personal experiences, events, documentaries and interviews in bothtemporary and permanent situations.
C109.3	Describe products and processes and explain their purposes clearly and accurately.
C109.4	Apply speaking skills in formal and informal communicative contexts.
C109.5	Analyze or use their opinions effectively in both formal and informal discussion.

Course Name: C110 Year of Study: 2022-2023 Semester: II

Subject Code & Name: HS3251- PROFESSIONAL ENGLISH II

CO	STATEMENT
C110.1	Write essays and emails in different forms effectively.
C110.2	Write letters and responses to complaints for the causal relations.
C110.3	Analyze the news reports, excerpts and case studies.
C110.4	Write the reports of events and transcoding.
C110.5	Write job application with resume in the context of job search.

Course Name: C111 Year Of Study: 2022-2023 Semester: II

Subject Code/Subject Name: MA3251- STATISTICS AND NUMERICAL METHODS

CO	STATEMENT
C111.1	Analyze the concepts of sampling, mean and variance using various tests.
C111.2	Analyze the concepts of design of experiments using ANOVA.
C111.3	Solve the algebraic and numerical equations using numerical techniques.
C111.4	Evaluate the numerical differentiation and integration using different methods.
C111.5	Solve the first order differential equations using various methods.

Course Name: C112 Year of Study: 2021-2022 Semester: I

Subject Code & Name: PH3256- PHYSICS FOR INFORMATION SCIENCE

СО	STATEMENT
C112.1	Explain the significance of electron theories and energy band structures.
C112.2	Apply the basics of semiconductor physics and its applications in various devices.
C112.3	Comprehend the different magnetic properties of materials and their applications indata storage.
C112.4	Summarize the functioning of optical materials for opto-electronic devices.
C112.5	Describe the basics of quantum structures and their applications in nano electronics.

Course Name: C116 Year Of Study: 2022-2023 Semester: II

Subject Code/Subject Name GE3252- TAMILS AND TECHNOLOGY

СО	STATEMENT
C116.1	Analyze the concepts of sampling, mean and variance using various tests.
C116.2	Analyze the concepts of design of experiments using ANOVA.
C116.3	Solve the algebraic and numerical equations using numerical techniques.
C116.4	Evaluate the numerical differentiation and integration using different methods.
C116.5	Solve the first order differential equations using various methods.

Course Name: C117 Year of Study: 2021-2022 Semester: II

Subject Code & Name: CS3251- PROGRAMING IN C

СО	STATEMENT
C117.1	Explain the significance of electron theories and energy band structures.
C117.2	Apply the basics of semiconductor physics and its applications in various devices.
C117.3	Comprehend the different magnetic properties of materials and their applications indata storage.
C117.4	Summarize the functioning of optical materials for opto-electronic devices.
C117.5	Describe the basics of quantum structures and their applications in nano electronics.

Course Name: C118 Year Of Study: 2022-2023 Semester: II

Subject Code/Subject Name GE3251- ENGINEERING GRAPHICS

СО	STATEMENT
C118.1	Analyze the concepts of sampling, mean and variance using various tests.
C118.2	Analyze the concepts of design of experiments using ANOVA.
C118.3	Solve the algebraic and numerical equations using numerical techniques.
C118.4	Evaluate the numerical differentiation and integration using different methods.
C118.5	Solve the first order differential equations using various methods.

Course Name: C119 Year of Study: 2022-2023 Semester: II

Subject Code & Name: BE3251- BASICS OF ELECTRICAL AND ELECTRONICS ENGINEERING

CO	STATEMENT
C119.1	Explain the significance of electron theories and energy band structures.
C119.2	Apply the basics of semiconductor physics and its applications in various devices.
C119.3	Comprehend the different magnetic properties of materials and their applications indata storage.
C119.4	Summarize the functioning of optical materials for opto-electronic devices.
C119.5	Describe the basics of quantum structures and their applications in nano electronics.

Course Name: C118 Year Of Study: 2022-2023 Semester: II

Subject Code/Subject Name GE3272- COMMUNICATION LABORATORY / FOREIGN

#### LANGUAGE

СО	STATEMENT
C118.1	Analyze the concepts of sampling, mean and variance using various tests.
C118.2	Analyze the concepts of design of experiments using ANOVA.
C118.3	Solve the algebraic and numerical equations using numerical techniques.
C118.4	Evaluate the numerical differentiation and integration using different methods.
C118.5	Solve the first order differential equations using various methods.

Course Name: C125 Year of Study: 2022-2023 Semester: II

Subject Code & Name: GE3271- ENGINEERING PRACTICES LABORATORY

CO	STATEMENT
C125.1	Explain the significance of electron theories and energy band structures.
C125.2	Apply the basics of semiconductor physics and its applications in various devices.
C125.3	Comprehend the different magnetic properties of materials and their applications indata storage.
C125.4	Summarize the functioning of optical materials for opto-electronic devices.
C125.5	Describe the basics of quantum structures and their applications in nano electronics.

Course Name: C126 Year Of Study: 2022-2023 Semester: II

Subject Code/Subject Name CS3271- PROGRAMMING IN C LABORATORY

СО	STATEMENT
C126.1	Analyze the concepts of sampling, mean and variance using various tests.
C126.2	Analyze the concepts of design of experiments using ANOVA.
C126.3	Solve the algebraic and numerical equations using numerical techniques.
C126.4	Evaluate the numerical differentiation and integration using different methods.
C126.5	Solve the first order differential equations using various methods.

# **DEPARTMENT OF INFORMATION TECHNOLOGY**

#### 3.1.1 COURSE OUTCOME

## **REGULATION 2021**

After successful completion of the course, student will be able to

Course Name: C201 Year Of Study: 2022-2023 Semester: III

**Subject Code/Subject Name:** MA3354-DISCRETE MATHEMATICS

CO	STATEMENT
C201.1	Apply the concepts of logic theory to construct the truth table, mathematical arguments and different methods of proofs.
C201.2	Apply the concepts of mathematical induction, pigeonhole principle, permutation and combination to solve the real life problems.
C201.3	Analyze the definitions and different types of graphs
C201.4	Analyze the concepts and properties of algebraic structures.
C201.5	Analyze the algebraic properties of lattices and Boolean algebra.

Course Name: C202 Year of Study: 2022-2023 Semester: III

Subject Code & Subject Name: CS3351-DIGITAL PRINCIPLES AND COMPUTER

**ORGANIZATION** 

СО	STATEMENT
C202.1	Design various combinational digital circuits using logic gates.
C202.2	Design various sequential digital circuits using logic gates.
C202.3	Summarize the basic structure and operation of a digital computer.
C202.4	Analyze data path unit, control unit for processor and to familiarize with the hazards.
C202.5	Analyze the concept of various memories and I/O interfacing.

Course Name: C203 Year of Study: 2022-2023 Semester: III

Subject Code & Subject Name: CS3352 FOUNDATIONS OF DATA SCIENCE

СО	STATEMENT
C203.1	Summarize the data science process.
C203.2	Explain the different types of data description for data science process.
C203.3	Explain the relationships between data.
C203.4	Explain the Python Libraries for Data Wrangling.
C203.5	Describe Visualization Libraries in Python to interpret and explore data.

Course Name: C204 Year of Study: 2022-2023 Semester: III

Subject Code & Subject Name: CD3291 DATA STRUCTURES AND ALGORITHMS

CO	STATEMENT
C204.1	Explain abstract data types and classes in Python
C204.2	Write linear data structures such as list, queues and stacks according to the needs of different applications
C204.3	Analyze the various searching and sorting algorithms
C204.4	Solve appropriate tree operation for solving a given problem
C204.5	Write appropriate graph algorithm for graph operation

Course Name: C205 Year of Study: 2022-2023 Semester: III

Subject Code & Subject Name: CS3391-OBJECT ORIENTED PROGRAMMING

СО	STATEMENT
C205.1	Comprehend OOPS concept and basic concepts of JAVA.
C205.2	Apply the principles of inheritance, packages and interfaces.
C205.3	Apply features of exception handling and multithreading in Java program.
C205.4	Develop Java applications with I/O, Generic and string handling.
C205.5	Design Java application using JAVAFX Event handling.

Course Name: C206 Year of Study: 2022-2023 Semester: III

Subject Code & Subject Name: CD3281 DATA STRUCTURES LABORATORY

CO	STATEMENT
C206.1	Write the simple ADTs in Python.
C206.2	Design and implement the linear data structures- lists, stacks and queues.
C206.3	Write a program for searching, sorting and hashing algorithm in python.
C206.4	Design and implement the tree structures such searching, indexing and sorting.
C206.5	Write a graph algorithm in python.

Course Name: C207 Year of Study: 2022-2023 Semester: III

Subject Code & Subject Name: CS3381 OBJECT ORIENTED PROGRAMMING

LABORATOTRY

CO	STATEMENT
C207.1	Write Java Application using Classes and Interface.
C207.2	Write Java Program to Perform String Operations using Array List and Abstract Class
C207.3	Write a java Program using Exception Handling, File and Multithreading
C207.4	Write a java Program using generic functions and event driven program paradigm
C207.4	Create an Application using the Javafx Program.

Course Name: C208 Year of Study: 2022-2023 Semester: III

Subject Code & Subject Name: CS3361-DATA SCIENCE LABORATORY

СО	STATEMENT
C208.1	Summarize the python libraries for data science.
C208.2	Design the basic statistical and probability measures for data Science.
C208.3	Design a descriptive analysis on the benchmark dataset.
C208.4	Design Correlation and Regression Analytics on standard data set.
C208.5	Design data using visualization packages in python.

Course Name: C210 Year of Study: 2022-2023 Semester: IV

Subject Code & Subject Name: CS3452 THEORY OF COMPUTATION

CO	STATEMENT
C210.1	Solve the theory of automata using DFA and NFA.
C210.2	Apply the regular expression and regular language for any pattern.
C210.3	Evaluate the Context Free Grammar and Push Down Automata.
C210.4	Analyze the types of Normal Forms and Turing Machine.
C210.5	Summarize the undecidable problems.

Course Name: C211 Year Of Study: 2022-2023 Semester: IV

Subject Code & Subject Name: CS3491 ARTIFICIAL INTELLIGENCE AND MACHINE

**LEARING** 

CO	STATEMENT
C211.1	Apply appropriate search algorithms for problem solving
C211.2	Apply reasoning under uncertainty
C211.3	Analyze supervised learning models
C211.4	Summarize ensembling and unsupervised model
C211.5	Analyze deep learning neural network model

Course Name: C212 Year of Study: 2022-2023 Semester: IV

Subject Code & Subject Name: CS3492 DATABASE MANAGEMENT SYSTEM

СО	STATEMENT
C212.1	Describe the fundamental concepts of relational database and SQL
C212.2	Apply relational model from E-R model to perform database design effectively and optimize queries using normalization criteria.
C212.3	Summarize the properties of transaction and concurrency control mechanism.
C212.4	Apply the various indexing strategies in different database systems, various storage and
C212.5	Explain the advanced databases like distributed databases, Graph database & Encryption and Public key infrastructures.

Course Name: C213 Year of Study: 2022-2023 Semester: IV

**Subject Code & Subject Name:** IT3401 WEB ESSENTIALS

CO	STATEMENT
C213.1	Comprehend the basic concepts of Web.
C213.2	Design interactive web pages using HTML and CSS.
C213.3	Apply Javascript to make interactive and dynamic web pages.
C213.4	Design Server side processing using PHP.
C213.5	Design Simple database applications using Java Servlets.

Course Name: C214 Year of Study: 2022-2023 Semester: IV

Subject Code & Subject Name: CS3451 INTRODUCTION TO OPERATING SYSTEMS

СО	STATEMENT
C214.1	Summarize the basic concepts and functions of Operating Systems.
C214.2	various CPU scheduling algorithms, synchronization primitives and deadlock, handling methods.
C214.3	Apply the various memory management schemes and page replacement algorithms.
C214.4	Apply the various disk scheduling algorithms, file system implementation, protection, and security mechanisms.
C214.5	Explain the virtualization of machine and Mobile OS like iOS and Android.

Course Name: C215 Year of Study: 2022-2023 Semester: IV

Subject Code & Subject Name: GE3451ENVIRONMENTAL SCIENCES AND

**SUSTAINABILITY** 

СО	STATEMENT
C215.1	Describe about the Environment, Ecosystem and the importance of biodiversity
C215.2	Summarize Environmental pollution and importance of public participation in environmental protection.
C215.3	Create awareness on the natural resources and its benefits.
C215.4	Analyze the impact of engineering solution in environmental problem, social issues and need for sustainable development.
C215.5	Analyze the standard of living and realize the serious environmental disasters.

Course Name: C216 Year of Study: 2022-2023 Semester: IV

Subject Code & Subject Name: CS3461 OPERATING SYSTEMS LABORATORY

СО	STATEMENT
C216.1	Write basic Unix commands and shell programming.
C216.2	Write C programs to implement various scheduling algorithms, semaphores and shared memory and IPC.
C216.3	Write C programs using Bankers algorithm for deadlock detection and avoidance.
C216.4	Write C programs for the implementation of memory allocation, memory management and page replacement algorithms.
C216.5	Write C programs to implement various file organizations and allocation strategies.

Course Name: C217 Year of Study: 2022-2023 Semester: IV

Subject Code & Subject Name: CS8481 DATABASE MANAGEMENT SYSTEMS

LABORATORY

CO	STATEMENT
C217.1	Apply typical data definitions and manipulation commands,
	implementation of nested and join queries
C217.2	Write simple application using views, sequences, and synonyms.
C217.3	Write database programming using implicit and explicit cursors.
C217.4	Analyze Tables, views, functions, procedures, triggers and exception
	handling.
C217.5	Write an applications that require front-end tools

Course Name: C301 Year of Study: 2023-2024 Semester: V

**Subject Code & Subject Name:** CS3591 COMPUTER NETWORKS

СО	STATEMENT
C301.1	Summarize the basic layers and various application layer protocols
C301.2	Comprehend the transport layer protocols, congestion control and avoidance techniques
C301.3	Describe the switching techniques and various protocols on the network layer
C301.4	Analyze various routing algorithms and protocols.
C301.5	Comprehend the data flow in data link layer and physical layer

Course Name: C302 Year of Study: 2023-2024 Semester: V

**Subject Code & Subject Name:** IT3501 FULL STACK WEB DEVELOPMENT

CO	STATEMENT
C302.1	Describe the various components available in web application development.
C302.2	Apply Node.js for application development.
C302.3	Develop applications with MongoDB.
C302.4	Apply the features of Angular and Express in Web Applications.
C302.5	Develop web applications with React.

Course Name: C303 Year Of Study: 2023-2024 Semester: V

Subject Code & Subject Name: CS3551 DISTRIBUTED COMPUTING

CO	STATEMENT
C303.1	Summarize the foundations of distributed systems, design issues and challenges and the need for global state in distributed systems.
C303.2	Solve Synchronization problems and explain the issues related to clock Synchronization, various message ordering, group communication and snapshots recording algorithms.
C303.3	Solve the distributed mutual exclusion and deadlock detection algorithms.
C303.4	Apply Consensus and recovery protocols in Distributed Systems.
C303.5	Summarize the fundamentals of cloud computing.

Course Name: C304 Year of Study: 2023-2024 Semester: V

**Subject Code & Subject Name:** CS3691 EMBEDDED SYSTEMS AND IOT

СО	STATEMENT
C304.1	Explain the architecture of Embedded Processors
C304.2	Write embedded C programs.
C304.3	Analyze simple embedded applications.
C304.4	Summarize the communication models in IoT
C304.5	Design IoT applications using Arduino/Raspberry Pi/open platform

Course Name: C312 Year of Study: 2023-2024 Semester: V

**Subject Code & Subject Name:** CCS334 BIG DATA ANALYTICS

CO	STATEMENT
C312.1	Comprehend big data and its use cases from selected business domains.
C312.2	Summarize NoSQL big data management.
C312.3	Apply map-reduce analytics using Hadoop.
C312.4	Apply Hadoop in big data analytics
C312.5	Apply Hadoop-related tools such as HBase, Cassandra, Hive

Course Name: C313 Year of Study: 2023-2024 Semester: V

Subject Code & Subject Name: CCS335 CLOUD COMPUTING

CO	STATEMENT
C313.1	Comprehend the principles behind cloud architecture and design challenges
C313.2	Apply the concepts of virtualization and its types.
C313.3	Analyze Virtualization in hardware resources and Docker.
C313.4	Analyze various Cloud services and setup a cloud environment.
C313.5	Explain various security challenges in cloud environment.

Course Name: C321 Year of Study: 2023-2024 Semester: V

Subject Code & Subject Name: IT351 FULL STACK WEB DEVELOPMENT LABORATORY

CO	STATEMENT
C321.1	Design full stack applications with clear understanding of user interface, business logic and data storage.
C321.2	Design and develop user interface screens
C321.3	Describe the functional requirements using appropriate tool
C321.4	
C321.4	Design and develop database based on the requirements
C321.5	Design all the necessary components of the application

Course Name: C322 Year of Study: 2023-2024 Semester: VI

Subject Code & Subject Name: CCS356 OBJECT ORIENTED SOFTWARE ENGINEERING

CO	STATEMENT
C322.1	Comprehend various Software development lifecycle models.
C322.2	Apply Project Management approaches as well as cost & Schedule Estimation Strategies.
C322.3	Analyze the concept of Software Design.
C322.4	Summarize Software Testing and Maintenance.
C322.5	Comprehend the concept of Project Management.

Course Name: C329 Year of Study: 2023-2024 Semester: VI

**Subject Code & Subject Name:** OMA351 GRAPH THEORY

СО	STATEMENT
C329.1	Apply graph models for solving real world problem.
C329.2	Describe the characterization of trees and graph connectivity.
C329.3	Describe the characterization study of Eulerian graphs and Hamiltonian graphs.
C329.4	Apply the graph coloring concepts and its significance in partitioning problems.
C329.5	Apply the standard optimization graph algorithms in solving application problems

Course Name: C333 Year of Study: 2023-2024 Semester: VI

Subject Code & Subject Name: CCS341 DATA WAREHOUSING

СО	STATEMENT
C333.1	Describe the Data warehouse components and architecture.
C333.2	Discuss the types of data warehouse, OLAP, OLTP.
C333.3	Discuss categories of metadata, Data Mart, Partitioning Strategy.
C333.4	Describe the Multi-Dimensional Data Modeling and various schema.
C333.5	Explain the various Data warehousing system managers and process managers

Course Name: C344 Year of Study: 2023-2024 Semester: VI

Subject Code & Subject Name: CCS354 NETWORK SECURITY

СО	STATEMENT
C344.1	Analyze the different encryption techniques.
C344.2	Analyze the key management techniques and authentication.
C344.3	Apply various security techniques to network and transport layers.
C344.4	Analyze security standards in Application layer.
C344.5	Apply security practices in real time applications.

Course Name: C347 Year of Study: 2023-2024 Semester: VI

**Subject Code & Subject Name:** CCS332 MULTIMEDIA AND ANIMATION

CO	STATEMENT
C347.1	Summarize the Fundamental Concepts of Multimedia Elements and Systems.
C347.2	Describe Multimedia File Formats and Standards.
C347.3	Analyze the Process of Authoring Multimedia Presentations.
C347.4	Explain the Techniques of Animation in 2D and 3D and for the Mobile AI.
C347.5	Describe Different Popular Applications of Multimedia.

Course Name: C359 Year of Study: 2023-2024 Semester: VI

Subject Code & Subject Name: CCS339 CRYPTO CURRENCY AND BLOCK CHAIN

**TECHNOLOGIES** 

CO	STATEMENT
C359.1	Summarize the basic concepts of block chain
C359.2	Analyze the crypto currency and transactions in Bit coin network
C359.3	Describe the significance of Bit coin consensus
C359.4	Apply hyperledger fabric and Ethereum network platform to implement block chain applications
C359.5	Comprehend the applications of block chain.

Course Name: C362 Year of Study: 2023-2024 Semester: VI

**Subject Code & Subject Name:** IT3681 MOBILE APPLICATIONS DEVELOPMENT

LABORATORY

СО	STATEMENT
C362.1	Demonstrate the simple mobile applications using multiplatform environment.
C362.2	Apply the procedures and strategies to build mobile applications.
C362.3	Design the real time mobile applications for environmental society.
C362.4	Analyze the web-based applications that supports push notifications.
C362.5	Design the mobile applications that involves Flutter/Kotlin platform.

Course Name: C401 Year of Study: 2024-2025 Semester: VII

Subject Code & Subject Name: GE3791 HUMAN VALUES AND ETHICS

СО	STATEMENT
C401.1	Understanding democratic values influence policymaking and evaluate the effectiveness and fairness of policies.
C401.2	Apply democratic and scientific values to the harmonious functioning of both personal and professional life.
C401.3	Analysing skills, evidence-based decision-making, and a deep understanding of scientific reasoning and methodology.
C401.4	Apply ethical reasoning to address and resolve social issues.
C401.5	Understand the importance of transparency and fairness in science and the ethical implications of scientific inventions.

Course Name: C402 Year of Study: 2024-2025 Semester: VII

Subject Code & Subject Name: GE3751 PRINCIPLES OF MANAGEMENT

CO	STATEMENT
C402.1	Explain the basics of management and organization.
C402.2	Describe the concept of planning and setting objectives with their types and process.
C402.3	Comprehend the organizing types and structures, human resource management and depart mentation.
C402.4	Summarize the concepts of directing with motivational and leadership theories, process of communication & IT.
C402.5	Describe the basics of controlling process, computers & IT in management control.

Course Name: C411 Year of Study: 2024--2025 Semester: VII

Subject Code & Subject Name: AI3021 IT IN AGRICULTURAL SYSTEM

СО	STATEMENT
C411.1	Comprehend the application of IT in remote sensing applications
C411.2	Summarize how the green house can be automated
C411.3	Describe IT principles and concepts for management of field operations
C411.4	Summarize weather models their inputs and applications
C411.5	Summarize how IT can be used for e-governance in agriculture.

Course Name: C423 Year of Study: 2024-2025 Semester: VII

Subject Code & Subject Name: OEN351 DRINKING WATER SUPPLY AND MANAGEMENT

CO	STATEMENT
C423.1	Explain the principles of planning and designing public water supply systems,
	including objectives, design period, and population forecasting.
C423.2	Design and assess water conveyance systems, including intake structures,
	pipe materials, hydraulics, and the processes of installation and testing.
	Design water treatment plant units, covering aerators, flash mixers,
C423.3	coagulation, flocculation, sand filters, and disinfection, focusing on
	construction and maintenance
	Apply the principles of advanced water treatment technologies, addressing
C423.4	various methods for purification and mineral removal, and emphasizing
	aspects of construction, operation, and maintenance.
C423.5	Sum Summaries test automation techniques. Evaluate the principles of
	network design for water distribution, considering economic factors and
	computer applications used in optimizing the distribution system.

Course Name: C476 Year of Study: 2024-2025 Semester: VII

Subject Code & Subject Name: OGI352 GEOGRAPHIC INFORMATION SYSTEM

CO	STATEMENT
C476.1	Summarize basic ideas about GIS.
C476.2	Comprehend various data models used for GIS.
C476.3	Comprehend about data input and topology
C476.4	Comprehend about data quality and standards.
C476.5	Summarize about data management functions and data output