



R.M.D. ENGINEERING COLLEGE
(An Autonomous Institution)



DEPARTMENT OF INFORMATION TECHNOLOGY

REGULATION 2022

COURSE OUTCOME STATEMENTS

SEMESTER III

22MA301 – DISCRETE MATHEMATICS

Course Code	Course Outcome Statement
C201.1	Examine the validity of the logic and proofs.
C201.2	Demonstrate the usage of mathematical indication, permutation, combination, recurrence relations and generating functions.
C201.3	Apply graph theory techniques to solve real life problems.
C201.4	Apply algebraic techniques to formulate and solve group theoretic problems.
C201.5	Utilize the significance of lattices and Boolean algebra in computer science and engineering.

22IT301 – DESIGN THINKING

Course Code	Course Outcome Statement
C202.1	Describe the phases of design thinking process.
C202.2	Conduct an immersion activity to create an empathy map
C202.3	Define the key problems of the personas created.
C202.4	Apply the ideation phase steps to present the prototype ideas
C202.5	Create a prototype with value propositions and test the prototype

22CS301 – ADVANCED JAVA PROGRAMMING

Course Code	Course Outcome Statement
C203.1	Apply collections and IO Streams to efficiently manage and process data structures and perform input/output operations in Java.
C203.2	Apply Java Stream API and Junits to streamline data manipulation and perform unit testing for robust code development.
C203.3	Develop a Seamlessly integrate object-oriented programming with database operations for web applications using hibernate.
C203.4	Construct the power of the Spring Framework to provide a solid foundation for building scalable and maintainable applications.
C203.5	Organize application logic, user interface, and data flow using the Spring MVC framework for efficient and modular development.

22CS303 – DESIGN AND ANALYSIS OF ALGORITHMS

Course Code	Course Outcome Statement
C204.1	Examine the efficiency of recursive and non-recursive algorithms mathematically.
C204.2	Compare the efficiency of Brute force, Divide and conquer, Decrease and conquer, Transform and conquer algorithmic techniques.
C204.3	Infer the suitability of Dynamic programming.
C204.4	Demonstrate the usage of iterative improvement and greedy technique for optimization.
C204.5	Examine the limitations of algorithmic power and formulate the problems using backtracking and branch and bound technique.

22CS304 – OPERATING SYSTEMS

Course Code	Course Outcome Statement
C205.1	Implement the basic concepts of operating systems and process.
C205.2	Analyze various CPU scheduling algorithms and thread mechanism.
C205.3	Implement the concepts of process synchronization and deadlocks.
C205.4	Design various memory management schemes to given situation.
C205.5	Implement various I/O and file management techniques.

22GE311 – PRODUCT DEVELOPMENT LAB 3

Course Code	Course Outcome Statement
C206.1	Develop their skills in design concepts, rules and procedures.
C206.2	Develop their cognitive strategy to think, organize, learn and behave.
C206.3	Demonstrate the ability to provide conceptual design strategies for a product.
C206.4	Describe the procedure for designing a Mock-up model.
C206.5	Apply appropriate interdisciplinary and integrative strategies for solving complex problems

22GE301-UNIVERSAL HUMAN VALUES 2: UNDERSTANDING HARMONY

Course Code	Course Outcome Statement
C207.1	Demonstrate the importance of value education.
C207.2	Identify the responsibilities in life, and in handling problems with sustainable solutions, while keeping human relationships and human nature in mind.
C207.3	Express better relationship among others.
C207.4	Identify the importance of nature and existence.
C207.5	Interpret the implications of holistic view of harmony on professional ethics.

22GE201-TAMIL AND TECHNOLOGY

Course Code	Course Outcome Statement
C208.1	Identify the role of weaving and ceramic technology in ancient Tamil Culture.
C208.2	Assess the design and construction technology ideas in the current Tamil society.
C208.3	Identify the different types of manufacturing technology used in Tamil society and their significance.
C208.4	Classify agricultural and irrigation technologies in ancient Tamil society and its current relevance.
C208.5	Discuss the fundamentals of scientific Tamil and Tamil computing.

22CS311 – APTITUDE AND CODING SKILLS-I

Course Code	Course Outcome Statement
C209.1	Develop vocabulary for effective communication and reading skills.
C209.2	Build the logical reasoning and quantitative skills.
C209.3	Develop error correction and debugging skills in programming.

SEMESTER IV

22MA401 – PROBABILITY AND STATISTICS

Course Code	Course Outcome Statement
C210.1	Demonstrate the usage of modern probability theory and standard distributions.
C210.2	Categorize the probability models and function of random variables based on one- and two-dimensional random variables.
C210.3	Employ the concept of testing the hypothesis in real life problems.
C210.4	Identify the applications of design of experiment.
C210.5	Employ the statistical quality control methods in engineering and management problems

22IT401 – ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Course Code	Course Outcome Statement
C211.1	Demonstrate various problem solving and search strategies.
C211.2	Employ knowledge representation and reasoning strategies
C211.3	Examine supervised learning techniques and its applications.
C211.4	Examine classification and Regression techniques, Semi – supervised and Unsupervised techniques and its applications.
C211.5	Inspect various reasoning natural language understanding, computer vision, automatic programming and machine learning.

22IT402 – COMPUTER ARCHITECTURE AND MICROPROCESSORS

Course Code	Course Outcome Statement
C212.1	Describe the basics structure of computers, operations and instructions.
C212.2	Design arithmetic and logic unit.
C212.3	Demonstrate simple and pipelined Datapath construction.
C212.4	Examine the various memory systems and I/O communication.
C212.5	Demonstrate the architecture of 8086 microprocessor and assembly programming.

22IT403 – WEB DEVELOPMENT FRAMEWORKS

Course Code	Course Outcome Statement
C213.1	Design web pages using text formatting, graphics, audio, and video.
C213.2	Examine the usage of Rest API, prop Types.
C213.3	Design web application using latest React Framework.
C213.4	Experiment various React features including functions, components, and services.
C213.5	Experiment usage of ReactJs hooks using for different applications.

22IT404-APPLICATION SYSTEM DESIGN WITH UML

Course Code	Course Outcome Statement
C214.1	Interpret business problem statement in object-oriented notation.
C214.2	Construct use case diagram and class diagrams.
C214.3	Inspect various scenarios based on software requirements.
C214.4	Construct State diagrams and Activity Diagram using UML Modeling.
C214.5	Build an extendable and scalable solution using Design patterns.
C214.6	Develop and implement simple applications that make use of classes, packages and interfaces.

22GE411 – PRODUCT DEVELOPMENT LAB 4

Course Code	Course Outcome Statement
C215.1	Identify the real-time problems through literature.
C215.2	Develop feasible solutions for the problems.
C215.3	Evaluate the methods to develop solutions to the problem.
C215.4	Analyze the business opportunities for a new product.
C215.5	Prepare a detailed report for the experimental dissemination.

22CS411 – APTITUDE AND CODING SKILLS-II

Course Code	Course Outcome Statement
C216.1	Develop advanced vocabulary for effective communication and reading skills.
C216.2	Build an enhanced level of logical reasoning and quantitative skills.
C216.3	Develop error correction and debugging skills in programming.
C216.4	Apply data structures and algorithms in problem solving.