



R.M.K. ENGINEERING COLLEGE

(An Autonomous Institution)

R.S.M Nagar, Kavaraipettai, Gummidipoondi Taluk, Thiruvallur
District, Tamil Nadu- 601206

Affiliated to Anna University, Chennai / Approved by AICTE, New
Delhi/Accredited by NAAC with A+ Grade An ISO 21001:2018 Certified
Institution / All the Eligible UG Programs are accredited by NBA, New
Delhi



Department of Computer Science and Design

Course Outcomes

EVEN Semester 2024-25

Sl. No.	Semester	Theory/ Practical	Course Code / Course Name
1	4	Theory	Probability and Statistics
2	4	Theory with Practical	Web Development Frameworks
3	4	Theory	Design and analysis of algorithms
4	4	Theory	Human Computer Interaction
5	4	Theory with Practical	Design Programming
6	4	Theory with Practical	Professional Elective I
7	4	Practical	Advanced Aptitude and Coding Skills II
8	4	Practical	Product Development Lab - 4
9	4	Practical	Aptitude and Coding Skills II
10	4	-	Yoga/ Personality Development (Non Credit)
Sl. No.	Semester	Theory/ Practical	Course Code / Course Name
1	6	Theory	Professional Ethics
2	6	Theory	Open Elective II
3	6	Theory with Practical	Object Oriented Software Engineering

4	6	Theory with Practical	Principles of UI/UX Design
5	6	Theory with Practical	Professional Elective IV
6	6	Theory with Practical	Professional Elective V
7	6	Practical	Advanced Aptitude and Coding Skills II
Sl. No.	Semester	Theory/ Practical	Course Code / Course Name
1	8	Practical	Project Work

EVEN Semester 2024-25

4th Semester – B.E. Computer Science and Design

22MA401- PROBABILITY AND STATISTICS

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Calculate the statistical measures of standard distributions.

CO2: Compute the correlation & regression for two dimensional random variables

CO3: Apply the concept of testing the hypothesis.

CO4: Implement the concept of analysis of variance for various experimental designs.

CO5: Demonstrate the control charts for variables and attributes

22IT403- WEB DEVELOPMENT FRAMEWORKS

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Personalize web pages using text formatting, graphics, audio, and video.

CO2 : Hands on knowledge on Rest API , propTypes.

CO3: Able to develop a web application using latest React Framework.

CO4 : Apply various React features including functions, components, and services.

CO5 : Able to develop application using ReactJshooks.

22CS306- Design and analysis of algorithms

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Evaluate the efficiency of algorithms using asymptotic notations.

CO2: Design, implement, and analyze the time complexity of various sorting algorithms

CO3: Develop solutions for optimization problems using dynamic programming techniques.

CO4: Implement and analyze greedy algorithms for optimization problems

CO5: Develop solutions for complex problems using backtracking and branch and bound techniques.

CO6: Analyze NP-complete problems and implement approximation algorithms for these problems

22CD401- Human Computer Interaction

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Enumerate the basic concepts of human, computer interactions.

CO2: Inspect software design process in human computer interaction

CO3: Examine various models and theories related to human computer interaction

CO4: Build meaningful user interface

CO5: Establish the different levels of communication across the application stakeholders.

22CD402- Design Programming

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Learn about Blender interface.

CO2: Understand Texture Mapping and Rendering.

CO3: Analyse Text to Mesh Object and Curve conversion.

CO4: Know the scripting fundamentals.

CO5: Understand accessing game objects.

Laboratory

CO 3: Evaluate the methods to develop solutions to the problem.

CO 4: Analyze the business opportunities for a new product.

CO 5: Prepare a detailed report for the experimental dissemination.

22CS411- APTITUDE AND CODING SKILLS – II

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Develop advanced vocabulary for effective communication and reading skills.

CO2: Build an enhanced level of logical reasoning and quantitative skills.

22ME411- Product Development Lab - 4

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO 1: Identify the real-time problems through literature.

CO 2: Develop feasible solutions for the problems.

CO3: Develop error correction and debugging skills in programming.

CO4: Apply data structures and algorithms in problem solving.

22CS412- MINI PROJECTAND DESIGN THINKING LAB

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Understand the design thinking process and able to visualize the problem

CO2: Analyse the problem using innovation tools

CO3: Design a prototype for an identified problem solution.

CO4: Testing and evaluate strategies in improving the solution.

CO5:Apply the innovation ideas to real-world applications.

EVEN Semester 2024-25

6th Semester – B.E. Computer Science and Design

22CE701- PROFESSIONAL ETHICS IN ENGINEERING

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Summarize the importance of human values in work place.

CO2: Discuss the senses of engineering ethics, moral dilemmas, moral autonomy and uses of ethical theories.

CO3: Describe the role of engineers as responsible experimenters and necessity of codes of ethics in engineering.

CO4: Explain safety, risk, responsibilities and rights in the society.

CO5: Analyze the global issues related to environmental ethics, computer ethics, weapons development and the role of engineers as expert witnesses and advisors.

CO6: Apply ethics in society and discuss the ethical issues related to engineering.

22AI005- INTRODUCTION TO GENERATIVE AI

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Elaborate the basic concepts of generative AI

CO2: Build generative AI to generate images.

22CS602- OBJECT ORIENTED SOFTWARE ENGINEERING

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Analyze and gather software requirements.

CO2: Use UML to create static and dynamic models.

CO3: Design software components using object-oriented principles.

CO4: Apply various software testing strategies.

CO5: Apply various software testing strategies.

22CD601- PRINCIPLES OF UI/UX DESIGN

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Understand the principles of User Interface (UI) Design in order to design with intention.

CO2: Learn the effective User eXperience (UX) and the psychology behind user decision making

CO3: Understand the importance of UX process and user Psychology

CO4: Elucidate the implications for designing web application with multimedia effects.

CO5: Create Wireframe and Prototype.

CO6: Develop the ability to work collaboratively within design teams and articulate design ideas and decisions effectively.

22CS611- ADVANCED APTITUDE AND CODING SKILLS – II

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Develop advanced vocabulary for effective communication and reading skills.

CO2: Build an enhanced level of logical reasoning and quantitative skills.

CO3: Develop error correction and debugging skills in programming.

CO4: Apply data structures and algorithms in problem solving.

CO3: Apply the concepts used in generative AI models.

CO4: Use various generative AI models.

CO5: Compare and use the various large language models.

CO6: Analyse the basics of prompt engineering.

22CD934 - C# AND .NET PROGRAMMING

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Implement Class and Object concepts using C# Language in the .NET Framework.

CO2: Develop distributed applications using .NET Framework.

CO3: Develop application using advanced C# features.

CO4: Understand window-based application, WCF and WWF

CO5: Learn assembly management, XAML handling and error resolution.

CO6: Create mobile applications using .NET compact Framework.

22CS903- BLOCK CHAIN TECHNOLOGY

Cos Course Outcome: Upon completion of the course, the students will be able to:

CO1: Understand the technology components of Blockchain and how it works behind the scenes.

CO2: Understand the Bitcoin and its limitations by comparing with other alternative coins.

CO3: Develop deep understanding of the Ethereum model, its consensus model, code execution.

CO4: Understand the architectural components of a Hyperledger and its development framework.

CO5: Explore the alternative blockchains and its emerging trends.

CO6 : Understand blockchain technology, including Bitcoin, Ethereum, and alternative blockchains