



Semester – III

Unique Course Number: CSC301

Course Name: Engineering Mathematics-III

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSC3011	Understand the concept of Laplace transform and its application to solve the real integrals in engineering problems.
CSC3012	Understand the concept of inverse Laplace transform of various functions and its applications in engineering problems.
CSC3013	Expand the periodic function by using the Fourier series for real-life problems and complex engineering problems.
CSC3014	Understand complex variable theory, application of harmonic conjugate to get orthogonal trajectories and analytic functions.
CSC3015	Apply the concept of Correlation and Regression to the engineering problems in data science, machine learning, and AI.
CSC3016	Understand the concepts of probability and expectation for getting the spread of the data and distribution of probabilities.

Unique Course Number: CSC302

Course Name: Discrete Structures and Graph Theory

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSC3021	Apply the notion of mathematical thinking, mathematical proofs and to use them in problem solving.
CSC3022	Explain concepts of logic for problem solving.
CSC3023	Demonstrate the concepts of relations, functions, Diagraph and Lattice
CSC3024	Illustrate concepts of graph theory in solving real world problems.
CSC3025	Apply the knowledge of groups and codes In Encoding-Decoding.
CSC3026	Analyze a complex computing problem and apply principles of discrete mathematics to identify solutions

Unique Course Number: CSC303

Course Name: Data Structure

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSC3031	Explain various data structures, related terminologies, and its types.
CSC3032	Demonstrate the working of various Linear data structures.
CSC3033	Represent & manipulate the data using non-linear data structure.
CSC3034	Select appropriate searching technique for a given problem.
CSC3035	Recommend the data structures to solve the problems.

Unique Course Number: CSC304

Course Name: Digital Logic & Computer Architecture

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSC3041	Learn different number systems and basic structure of computer system.
CSC3042	Demonstrate the arithmetic algorithms.
CSC3043	Understand the basic concepts of digital components and processor organization.
CSC3044	Understand the generation of control signals of computers.
CSC3045	Demonstrate the memory organization.
CSC3046	Describe the concepts of parallel processing and different Buses.



Unique Course Number: CSC305

Course Name: Computer Graphics

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSC3051	Describe the basic concepts of Computer Graphics.
CSC3052	Demonstrate various algorithms for basic graphics primitives.
CSC3053	Apply 2-D geometric transformations on graphical objects.
CSC3054	Use various Clipping algorithms on graphical objects
CSC3055	Explore 3-D geometric transformations, curve representation techniques and projections methods.
CSC3056	Explain visible surface detection techniques and Animation.

Unique Course Number: CSL301

Course Name: Data Structure Lab

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSL3011	Implement linear data structures & be able to handle operations like insertion, deletion, searching and traversing on them.
CSL3012	Implement Non-linear data structures & be able to handle operations like insertion, deletion, searching and traversing on them.
CSL3013	Select appropriate data structure and apply it in various problems.
CSL3014	Select appropriate searching techniques for given problems.
CSL3015	Demonstrate problem solving capabilities by applying various learned concepts of Data Structure to real life cases.

Unique Course Number: CSL302

Course Name: Digital Logic & Computer Architecture Lab

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSL3021	Understand the basics of digital components
CSL3022	Understand various types of codes and their conversion.
CSL3023	Understand the principles of combinational logic design.
CSL3024	Implement various algorithms for arithmetic operations.
CSL3025	Design the basic building blocks of a computer: ALU, registers, CPU and memory
CSL3026	Understand the logic of flip flops and its conversion.

Unique Course Number: CSL303

Course Name: Computer Graphics Lab

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSL3031	Implement various output primitive algorithms.
CSL3032	Use and apply various filled area primitive algorithms.
CSL3033	Apply various transformation algorithms on 2D graphical objects
CSL3034	Apply clipping algorithms on 2D graphical objects.
CSL3035	Perform curve and fractal generation methods.
CSL3036	Develop a Graphical application/Animation based on learned concept



Unique Course Number: CSL304

**Course Name: Skill base Lab course: Object Oriented
 Programming with Java**

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSL3041	Apply fundamental programming constructs.
CSL3042	Identify classes, objects, members of a class and relationship among them needed for a specific problem and write java application using OOP principles and packages
CSL3043	Demonstrate the concept of array, strings and vector
CSL3044	Implement the concept of inheritance and interfaces.
CSL3045	Implement the notion of exception handling and multithreading.
CSL3046	Develop GUI based applications.

Unique Course Number: CSM301

Course Name: Mini Project – 1 A

Unique CO Number	Course Outcome (CO) Statement
	Students will be able to,
CSM3011	Identify problems based on societal / research needs.
CSM3012	Apply Knowledge and skill to solve societal problems in a group.
CSM3013	Develop interpersonal skills to work as member of a group or leader.
CSM3014	Draw the proper inferences from available results through theoretical/experimental/simulations.
CSM3015	Analyze the impact of solutions in societal and environmental context for sustainable development.
CSM3016	Use standard norms of engineering practices
CSM3017	Excel in written and oral communication.
CSM3018	Demonstrate capabilities of self-learning in a group, which leads to lifelong learning.
CSM3019	Demonstrate project management principles during project work.