Department Of Cyber Security

Sem	Course Code	Course Name	CO Number	Course Outcome Statements
III	CSC301	Engineering Mathematics- III	CSC3011	Apply the concept of Laplace transform to solve the real integrals in engineering problems.
			CSC3012	Apply the concept of inverse Laplace transform of various functions in engineering problems.
			CSC3013	Expand the periodic function by using Fourier series for real life problems and complex engineering problems.
			CSC3014	Find orthogonal trajectories and analytic function by using basic concepts of complex variable theory.
			CSC3015	Apply the concept of Correlation and Regression to the engineering problems in data science, machine learning and AI.
			CSC3016	Illustrate understanding of the concepts of probability and expectation forgetting the spread of the data and distribution of probabilities.
III	CSC302	Discrete Structures and Graph Theory	CSC3021	Understand the notion of mathematical thinking, mathematical proofs and to apply them in problem solving.
			CSC3022	Ability to reason logically.
			CSC3023	Ability to understand relations, functions, Diagraph and Lattice
			CSC3024	Ability to understand and apply concepts of graph theory in solving real world problems
			CSC3025	Understand use of groups and codes in Encoding-Decoding
			CSC3026	Analyze a complex computing problem and apply principles of discrete mathematics to identify solution
III	CSC303	Data Structure	CSC3031	Implement Linear and Non-Linear data structures.
			CSC3032	Handle various operations like searching, insertion, deletion and traversals on various data structures.
			CSC3033	Explain various data structures, related terminologies and its types.
			CSC3034	Choose appropriate data structure and apply it to solve problems in various domains.
			CSC3035	Analyze and Implement appropriate searching techniques for a given problem.
			CSC3036	Demonstrate the ability to analyze, design, apply and use data structures to solve engineering problems and evaluate their solutions.
III	CSC304	Digital Logic & Computer Organization and Architecture	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.
III	CSC305	Computer Graphics	CSC305.1	Describe the basic concepts of Computer Graphics.
			CSC305.	Demonstrate various algorithms for basic graphics primitives.
			CSC305.	Apply 2-D geometric transformations on graphical objects.
			CSC305.	Use various clipping algorithms on graphical objects
			CSC305.	Explore 3-D geometric transformations, curve representation techniques and projections methods.
			CSC305.	Explain visible surface detection techniques and Animation.
III	CSL301	Data Structure Lab	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.
III	CSL302	Digital Logic & Computer Organization and Architecture Lab	CSL3021	To understand the basics of digital components
			CSL3022	Design the basic building blocks of a computer: ALU, registers, CPU and memory
			CSL3023	To recognize the importance of digital systems in computer architecture
			CSL3024	To implement various algorithms for arithmetic operations.
III	CSL303	Computer Graphics Lab	CSL3031	Implement various output and filled area primitive algorithms
			CSL3032	Apply transformation, projection and clipping algorithms on graphical objects.
			CSL3033	Perform curve and fractal generation methods.
			CSL3034	Develop a Graphical application/Animation based on learned concept
III	CSL304	Skill based Lab Course: Object Oriented Programming with Java	CSL3041	To apply fundamental programming constructs.
			CSL3042	To illustrate the concept of packages, classes and objects.
			CSL3043	To elaborate the concept of strings, arrays and vectors.
			CSL3044	To implement the concept of inheritance and interfaces
			CSL3045	To implement the concept of exception handling and multithreading
			CSL3046	To develop GUI based application
III	CSM301	Mini Project -1A	CSM3011	To identify and Apply Knowledge to solve societal problems and research needs.
			CSM3012	To summarize the proper inferences from available results through theoretical/ experimental/simulations.
			CSM3013	To acquire interpersonal Skills, capabilities of self-learning in a group,or as a member or a leader which leads to lifelong learning.
			CSM3014	To apply standard norms of engineering practices to Analyse the impact of solutions in societal and environmental contexts for sustainable development.
			CSM3015	To develop written and oral communication skills.
			CSM3016	To demonstrate project management principles during project work.