ST. FRANCIS INSTITUTE OF TECHNOLOGY

Department of Computer Engineering

Course Outcomes

Term I Academic year 2022-23 SE CMPN, Sem III

Subject: Applied Mathematics III (CSC301)

Course Outcomes

CO 301.1	Students will be able to understand the concept of Laplace transform and its application to solve the real integrals in engineering problems.
CO 301.2	Students will be able to understand the concept of inverse Laplace transform of various functions and its applications in engineering problems.
CO 301.3	Students will be able to expand the periodic function by using Fourier series for real life problems and complex engineering problems.
CO 301.4	Students will be able to understand complex variable theory, application of harmonic conjugate to get orthogonal trajectories and analytic function
CO 301.5	Students will be able to apply the concept of Correlation and Regression to the engineering problems in data science, machine learning and AI.
CO 301.6	Students will be able to understand the concepts of probability and expectation for getting the spread of the data and distribution of probabilities

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1		3										
CO2		3										
CO3		3										
CO4		3										
CO5		2										
CO6		2										

COs	PSO1	PSO2	PSO3	PSO4
CO1	3			
CO2	3			
CO3	3			
CO4	3			
CO5	2			
CO6	2			

Subject: Discrete Structures and Graph Theory (CSC302)

Course Outcomes

CSC302.1	Students will be develop the ability to reason logically and understand the notion of mathematical thinking, mathematical proofs and to apply them in problem solving
CSC302.2	Students will be able to understand the concept of relations and functions and be able to apply them suitably
CSC302.3	Students will be demonstrate understanding of posets and lattices and solve problems by identifying the appropriate structures
CSC302.4	Students will be able to analyze a complex counting problem and apply principles of discrete mathematics to identify solutions
CSC302.5	Students will be able understand the use of groups and codes and apply it to basic Encoding-Decoding techniques
CSC302.6	Students will demonstrate ability to understand and apply concepts of graph theory in solving real world problems

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	3	2	-	1	-	-	-	-	3
CO2	3	3	3	3	2	-	1	-	-	-	-	3
CO3	3	3	3	3	2	-	1	-	-	-	-	3
CO4	3	3	3	3	2	-	1	-	-	-	-	3
CO5	3	3	3	3	2	-	1	-	-	-	-	3
CO6	3	3	3	3	2	-	1	-	-	-	-	3

COs	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	1
CO2	3	2	2	1
CO3	3	2	2	1
CO4	3	2	2	1
CO5	3	2	2	1
CO6	3	2	2	1

Subject: Object Oriented Programing Methodology(CSC304)

Course Outcomes

CSL304.1	To apply fundamental object oriented programming constructs.
CSL304.2	To illustrate the object oriented programming concept of packages, classes and objects.
CSL304.3	To illustrate the object oriented programming concept of strings, arrays and vectors by implementing Real-time examples.
CSL304.4	To implement the object oriented programming concept of inheritance and interfaces.
CSL304.5	To implement the notion of exception handling and multithreading.
CSL304.6	To develop mini project using GUI based application like Applet, AWT classes and JDBC.

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	-	2	-	-	-	-	1	-	2	2
CO2	3	3	-	2	2	2	-	-	3	-	2	2
CO3	2	2	-	3	2	2	-	-	3	-	2	2
CO4	2	2	-	-	3	2	-	-	3	-	1	2
CO5	3	2	-	2	3	1		-	1	-	2	2
CO6	3	2	-	2	3	-	-	-	3	-	1	1

COs	PSO1	PSO2	PSO3	PSO4
CO1	2	1		2
CO2	2	2		2
CO3	2	3		2
CO4	2	3		2
CO5	2	2		2
CO6	2	3		2

Subject: Computer graphics (CSC305)

Course Outcomes

CSC305.1	To discuss and apply the basic concepts of Computer Graphics and analyze different types of displays and the storage of objects in them.
CSC305.2	To demonstrate and implement various algorithms for drawing basic shapes such as lines, circle, ellipse and filling of basic objects and their comparative analysis.
CSC305.3	To apply 2D geometric transformations such as rotation, scaling, translation on graphical objects.
CSC305.4	To apply 2D viewing and various clipping operations such as Point clipping , Line clipping algorithms and Polygon Clipping Algorithms on graphical objects.
CSC305.5	To apply 3D geometric transformation, viewing on graphical objects and explore solid model representation techniques and projections.
CSC305.6	To explain visible surface detection techniques and illumination models to make them understand the different shading techniques of the object based on visibility of the surfaces.

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3	2	1	1	2	3	NA	-	3	NA	-
CO2	2	3	3	3	3	3	3	NA	-	3	NA	-
CO3	2	3	3	3	3	3	3	NA	-	3	NA	-
CO4	3	3	3	3	3	3	3	NA	-	3	NA	-
CO5	3	3	3	3	3	3	3	NA	-	3	NA	-
CO6	3	3	3	3	3	3	3	NA	-	3	NA	-

COs	PSO1	PSO2	PSO3	PSO4
CO1	3	3	3	NA
CO2	3	3	3	NA
CO3	3	3	3	NA
CO4	3	3	3	NA
CO5	3	3	3	NA
CO6	3	3	3	NA

Subject: Digital Logic and Computer Organization and Architecture (CSC306)

Course Outcomes

CSC306.1	To study and analyze different number systems, their conversions and basics of various digital components.
CSC306.2	To apply correct data representation and implement the arithmetic algorithms for solving ALU operations.
CSC306.3	To design and analyze combinational and sequential circuits and to identify various addressing modes.
CSC306.4	To demonstrate types and working of control unit of computer.
CSC306.5	To distinguish between different types of memory and apply the memory mapping techniques
CSC306.6	To describe various buses multi-core architecture and explain pipelined and parallel processing.

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	-	1	3	-	-	-	-	-	-	2
CO2	3	2	-	3	3	-	-	-	-	-	-	2
CO3	3	2	-	2	2	-	-	-	-	-	-	2
CO4	3	3	-	2	3	-	-	-	-	-	-	0
CO5	3	2	-	2	2	-	-	-	-	-	-	0
CO6	3	2	-	0	1	-	-	-	-	-	-	2

COs	PSO1	PSO2	PSO3	PSO4
CO1	3	3	-	-
CO2	3	3	-	-
CO3	3	3	-	-
CO4	3	3	-	-
CO5	3	3	-	-
CO6	3	3	-	-