

Vidya Vikas Education Trust's Universal College of Engineering, Kaman Road, Vasai-401208 Accredited B+ Grade by NAAC

## DEPARTMENT OF COMPUTER ENGINEERING

Academic year: 2023-24

Semester: III

**Branch:** Computer

Course Code	Course Name	COs
CSC301	Engineering Mathematics-III	<ul> <li>Student will be able to:</li> <li>CO1. Understand the concept of Laplace transform and its application to solve the real integrals in engineering problems.</li> <li>CO2. Understand the concept of inverse Laplace transform of various functions and its applications in engineering problems.</li> <li>CO3. Expand the periodic function by using the Fourier series for reallife problems and complex engineering problems.</li> <li>CO4. Understand complex variable theory, application of harmonic conjugate to get orthogonal trajectories and analytic functions.</li> <li>CO5. Apply the concept of Correlation and Regression to the engineering problems in data science, machine learning, and AI.</li> <li>CO6. Understand the concepts of probability and expectation for getting the spread of the data and distribution of probabilities.</li> </ul>
CSC302	Discrete Structures and Graph Theory	<ul> <li>Student will be able to:</li> <li>CO1. Understand the notion of mathematical thinking, mathematical proofs and to apply them in problem solving.</li> <li>CO2. Ability to reason logically.</li> <li>CO3. Ability to understand relations, functions, Diagraph and Lattice.</li> <li>CO4. Ability to understand and apply concepts of graph theory in solving real world problems.</li> <li>CO5. Understand use of groups and codes in Encoding-Decoding</li> <li>CO6. Analyze a complex computing problem and apply principles of discrete mathematics to identify solutions</li> </ul>



## Vidya Vikas Education Trust's Universal College of Engineering, Kaman Road, Vasai-401208 Accredited B+ Grade by NAAC

## DEPARTMENT OF COMPUTER ENGINEERING

Academi	<u>c year: 2023-24</u>	Semester: III Branch: Computer
CSC303		Student will be able to:
050303	Data Structure	<b>CO1</b> . Students will be able to implement Linear and Non-Linear data
		structures.
		CO2. Students will be able to handle various operations like searching,
		insertion, deletion and traversals on various data structures.
		CO3. Students will be able to explain various data structures, related
		terminologies and its types.
		CO4. Students will be able to choose appropriate data structure and
		apply it to solve problems in various domains.
		CO5. Students will be able to analyze and Implement appropriate
		searching techniques for a given problem.
		CO6. Students will be able to demonstrate the ability to analyze, design,
		apply and use data structures to solve engineering problems and
		evaluate their solutions.
050204	Digital Logic	Student will be able to:
CSC304	& Computer	CO1. To learn different number systems and basic structure of
	Organization	computer system.
	and Architecture	<b>CO2.</b> To demonstrate the arithmetic algorithms.
	Architecture	CO3. To understand the basic concepts of digital components and
		processor organization.
		<b>CO4.</b> To understand the generation of control signals of computer.
		<b>CO5.</b> To demonstrates the memory organization.
		CO6. To describes the concepts of parallel processing and different
		Buses.
	Computer	Student will be able to:
CSC305	Graphics	
	_	<b>CO1</b> . Describe the basic concepts of Computer Graphics.
		<b>CO2</b> . Demonstrate various algorithms for basic graphics primitives.
		<b>CO3</b> . Apply 2-D geometric transformations on graphical objects.
		<b>CO4</b> . Use various Clipping algorithms on graphical objects
		<b>CO5</b> . Explore 3-D geometric transformations, curve representation
		techniques and projections methods.
		<b>CO6.</b> Explain visible surface detection techniques and Animation.