St. Francis Institute of Technology
Borivali (West), Mumbai-400103
Information Technology Department

COURSE OUTCOMES

Semester IV

Course name: C401 (Engineering Mathematics- IV) **Year of Study: 2021-22**

C401.1	Apply the Number Theory to different applications using theorem.
C401.2	Apply probability and understand PDF.
C401.3	Understand sampling theory and correlation.
C401.4	Apply the graphs and trees concepts to different applications.
C401.5	Understand group's theory.
C401.6	Understand the Lattice theory.

CO-PO Mapping

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

CO-PSO Mapping

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

Course name: C402 (Computer Networks and Network Design) **Year of Study: 2021-22**

C402.1	To describe the functionalities of each layer of the models and compare the Models and to execute and evaluate network administration commands and demonstrate their use in different network scenario.
C402.2	To categorize the types of transmission media and explain data link layer concepts, design issues and protocols and also demonstrate the installation and configuration of network simulator
C402.3	Learner/student will be able to analyze the routing protocols and assign IP address to networks and demonstrate and measure different network scenarios and their performance behavior.
C402.4	Learner/student will be able to explain the data transportation and session management issues and related protocols used for end to end delivery of data and implement the socket programming for client server architecture
C402.5	Learner/student will be able to list the data presentation techniques and illustrate the client/server model in application layer protocols and analyze the traffic flow of different protocols
C402.6	Learner/student will be able to apply networking concepts of IP address, Routing, and application services to design a network for an organization using a network design tool.

CO-PO Mapping

COs	PO1	PO2	PO3	PO4	PO5	PO 6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2
CO1	3	2										
CO2	3	3			2							
CO3	3	3										
CO4	3	3			3							
CO5		3	3									
CO6			3		2							

CO-PSO Mapping

COs	PSO1	PSO 2	PSO 3	PSO 4	
CO1		3			
CO2		3			
CO3		3			
CO4		3			
CO5		3			
CO6		3			

Course name: C403 (Operating System) **Year of Study: 2021-22**

C403.1	Describe the important computer system resources and the role of operating system in their management policies and algorithms.
C403.2	Understand the process management policies and scheduling of processes by CPU
C403.3	Evaluate the requirement for process synchronization and coordination handled by operating system
C403.4	Describe and analyze the memory management and its allocation policies.
C403.5	Identify use and evaluate the storage management policies with respect to different storage management technologies.
C403.6	Identify the need to create the special purpose operating system.

CO-PO Mapping

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

CO-PSO Mapping

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

Course name: C404 (Automata Theory) **Year of Study: 2021-2022**

Students will be able to:

C405.1	Apply the basic mathematical knowledge to understand, design, create, analyze and interpret Regular languages, Expression and Grammars.
C405.2	Analyze the complex problems and design different types of Finite Automata and Machines as Acceptor, Verifier and Translator.
C405.3	Understand, design, analyze and interpret Context Free languages, Expression and Grammars.
C405.4	Analyze, interpret and design different types of Push down Automata as Simple Parser interpret Regular languages, Expression and Grammars.
C405.5	Apply appropriate techniques to create different types of Turing Machines as Acceptor, Verifier, Translator and Basic computing machine.
C405.6	Compare, understand, analyze and demonstrate the knowledge of different languages, grammars, Automata and Machines and appreciate their power and convert Automata to Programs and Functions.

CO-PO Mapping

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

CO-PSO Mapping

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

Course name: C405 (Computer Organization and Architecture) **Year of Study: 2021-22**

C404.1	Students will be able to ***understand*** the fundamental concept of digital logic design and ***apply*** it to design and analyze combinational and sequential circuits.
C404.2	Students will be able to **describe** basic organization of a computer, the architecture of 8086 microprocessor and ***implement*** assembly language programming for 8086 microprocessors
C404.3	Students will be able to ***demonstrate*** control unit operations and ***conceptualize*** instruction level parallelism.
C404.4	Students will be able to ***list*** and ***identify*** integers and real numbers and ***perform*** computer arithmetic operations on integers.
C404.5	Students will be able to ***categorize*** memory organization and ***explain*** the function of each element of a memory hierarchy.
C404.6	Students will be able to ***examine*** and ***explain*** different methods for computer I/O mechanism.

CO-PO Mapping

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

CO-PSO Mapping

COs	PSO 1	PSO 2	PSO 3	PSO 4	
CO1	3				
CO2	3		2		
CO3	3				
CO4	3				
CO5	3		1		
CO6	3		1		

Course name: ITL404 (Python Lab) **Year of Study: 2021-22**

ITL404.1	Students shall be able to understand the structure, syntax and semantics of a Python program.
ITL404.2	Students shall be able to apply various data structures and functions in Python.
ITL404.3	Students shall be able to use the object-oriented concept Python programming to solve complex problems.
ITL404.4	Students shall be able to understand and apply Python packages and file handling.
ITL404.5	Students shall be able to design GUI in Python and develop applications using database connectivity.
ITL404.6	Students shall be able to analyse data using Python libraries.

CO-PO Mapping

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

CO-PSO Mapping

COs	PSO1	PSO 2	PSO 3	PSO 4	
CO1	3				
CO2	3				
CO3	3				
CO4	3				
CO5	3		2		
CO6	3		2		