DON BOSCO INSTITUTE OF TECHONOLGY, KURLA, MUMBAI

	Department of Computer Engineering (Even semester, 2021-22)						
	SE Comps						
Course Name:			EM-IV				
Course Code		(CSC401				
Faculty Name:	Ms. Pallavi						
Year	2 Sem IV						
CO Number	Course Outcome						
CSC401.1	Students v	Students will be able to Obtain Eigen values and Eigen vectors for a given square matrix					
CSC401.2	conditiona	conditional Probabilities using Bayes' theorem, (iv) Obtain pdf and cdf of discrete and continuous random variables					
CSC401.3	functions of square matrices, (iv) Obtain conditional probabilities using Bayes' theorem, (v) Obtain MGF and hence obtain the mean and						
CSC401.4	and poles and find residues at poles						
CSC401.5		optimization problems					
CSC401.6	attributes	and 'good	ness of fit', (ii) Apply Big – I	M method and Dual Simplex method to optimize an LPP and analyze solutions obtained			

Course Name:			AOA]			
Course Code		(CSC402				
Faculty Name:		Ditt	y Varghese				
Year	2	Sem	IV				
CO Number				Course Outcome			
CSC402.1	Ability to a	nalyze th	e running time and space c	omplexity of algorithms.			
CSC402.2	Ability to d	escribe, a	apply and analyze the comp	plexity of divide and conquer strategy.			
CSC402.3	Ability to d	Ability to describe, apply and analyze the complexity of greedy strategy.					
CSC402.4	Ability to describe, apply and analyze the complexity of dynamic programming strategy.						
CSC402.5	Ability to e	Ability to explain and apply backtracking, branch and bound.					
CSC402.6	Ability to e	xplain an	d apply string matching tec	hniques.			

Course Name:			DBMS				
Course Code	CSC403						
Faculty Name:		Ms.	Sana Shaikh				
Year	2	Sem	IV				
CO Number				Course Outcome			
CSC403.1	To unders	tand and	explain the fundamentals	of database management systems			
CSC403.2	To design	the conc	eptional model for any rea	ıl-life problem.			
CSC403.3	To convert the conceptional model to relational model and formulate relational algebra queries.						
CSC403.4	To apply a	To apply and formulate SQL queries to manage the database system.					
CSC403.5	To analyze	To analyze and improve the design of a relational database using the concepts of Normalization.					
CSC403.6	To correla	te the cor	ncepts of Transaction, Co	ncurrency and Recovery Management with each other in DBMS.			

Course Name:			OS	7			
Course Code	CSC404						
Faculty Name:		Ms. Kal	pita Wagaskar				
Year	2 Sem IV		IV				
CO Number				Course Outcome			
CSC404.1	Ability to u	nderstand	I role of Operating System	in terms of process, memory, file and I/O management.			
CSC404.2	Ability to a	rocess, thread, mutual exclusion and deadlock.					
CSC404.3	Ability to e	Ability to evaluate performance of process scheduling algorithms and IPC.					
CSC404.4	Ability to apply and analyse the concepts of memory management techniques						
CSC404.5	Ability to e	Ability to evaluate the performance of memory allocation and replacement techniques.					
CSC404.6	Ability to a	pply and	analyze different technique	es of file and I/O management.			

Course Name:		Mici	roprocessor				
Course Code	CSC405						
Faculty Name:	Ms. Sejal Chopra						
Year	2 Sem IV		IV				
CO Number				Course Outcome			
CSC405.1	Ability to explain the various architectures and internal working of x86 processors.						
CSC405.2	Ability to u	Ability to use and apply appropriate instructions to program a microprocessor to perform various tasks.					
CSC405.3	Ability to d	Ability to describe the concept and working of Interrupts.					
CSC405.4	Ability to identify and describe the functions and features of different peripheral chips.						
CSC405.5	Ability to in	Ability to interface and design system using memory chips and peripheral chips for 16 bit 8086 microprocessor.					
CSC405.6	Ability to a	ppraise th	ne structural modifications	of advanced processors.			

Course Name:		Д	OA Lab				
Course Code	CSL401						
Faculty Name:		Ditty	[,] Varghese				
Year	2	Sem	IV				
CO Number				Course Outcome			
CSL401.1	Ability to a	analyze th	e complexities of various p	roblems in different domains			
CSL401.2	Ability to p	rove the c	e running time of the basic algorithms for those classic problems in various domains.				
CSL401.3	develop th	develop the efficient algorithms for the new problem with suitable designing techniques.					
CSL401.4	Ability to implement the algorithms using different strategies.						
CSL401.5	Ability to c	Ability to compare the complexity of the algorithms for specific problem.					
CSL401.6	Ability to s	trengthen	the ability to identify and a	pply the suitable algorithm for the given real-world problem.			

Course Name:			BMS Lab				
Course Code			CSL402				
Faculty Name:		Ms.	Sana Shaikh				
Year	2 Sem IV						
CO Number				Course Outcome			
CSL402.1	To design	and crea	te conceptual or relationa	al model for any the real life problem using open source software tool.			
CSL402.2	To apply S	To apply SQL commands on database.					
CSL402.3	To apply [To apply Data Integrity and Security to protect the database from unauthorized access and manipulation.					
CSL402.4	To examin	To examine effect of concurrency control on database and implement and execute subquery/complex queries.					
CSL402.5	To apply v	To apply views and triggers for specific task.					
CSL402.6	To create	database	system for any real-time	e scenario and access the data through front end.			

Course Name:			OS Lab				
Course Code		(CSL403]			
Faculty Name:		Ms. Kal	pita Wagaskar				
Year	2	Sem	IV				
CO Number				Course Outcome			
CSL403.1	Ability to U	Ability to Understand and execute basic operating system commands.					
CSL403.2	Ability to v	Ability to write shell scripts and shell commands using kernel APIs.					
CSL403.3	Ability to e	bility to explore various system calls.					
CSL403.4	Ability to in	Ability to implement and analyze different process scheduling algorithms					
CSL403.5	Ability to implement and analyze different memory management algorithms.						
CSL403.6	Ability to e	Ability to evaluate process management techniques and deadlock handling using CPU-OS simulator .					

		SL404 Il Chopra IV	
	Sem	IV	
bility to exp			
bility to exp			Course Outcome
	lain and	identify different instructio	ns of 8086 microprocessor.
-			to program a microprocessor to perform various tasks.
bility to perf	form aritl	nmetic operations using as	ssembly language programming.
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bility to write	e and ex	ecute assembly code for o	code conversions.
skill Base La			
	Prof. Im	ran Ali Mirza	
2	Sem	IV	
Course Outcome			
Ability to develop simple programs using basic concepts in Python and Perl.			
Ability to demonstrate advanced concepts related to Python and Perl.			ed to Python and Perl.
bility to use	various	data structures in Python.	
			ork for developing Python based web applications.
bility to des	ign GUI	based applications in Pyth	on.
Ability to develop Mini projects using Python and/or Perl			
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2	Sem	IV	
			Course Outcome
Identify problems based on societal /research needs and apply knowledge & skill to solve societal problems in a group.			
Develop interpersonal skills to work as member of a group or leader.			
Draw the proper inferences from available results through theoretical/ experimental/simulations.			
Analyze the impact of solutions in societal and environmental context for sustainable development.			
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	bility to dev bility to den bility to use bility to use bility to des bility to des bility to dev bility to des bility to dev calculated and the product of the	bility to write assemblity to develop the bility to write and excitable to develop simple to develop simple to write and bility to demonstrate bility to understand bility to design GUI bility to develop Minimum	bility to write assembly code based on array oblitity to develop the program in mixed language bility to write and execute assembly code for deskill Base Lab Course: Python Programming CSL405 Prof. Imran Ali Mirza 2 Sem IV bility to develop simple programs using basice bility to demonstrate advanced concepts relate bility to use various data structures in Python. bility to understand and apply Django framework bility to design GUI based applications in Pytholity to develop Mini projects using Python and Mini Project 1-B CSM401 Ms. Ditty Varghese 2 Sem IV dentify problems based on societal /research revelop interpersonal skills to work as member fraw the proper inferences from available results.

	BE Comps							
Course Name:			HMI					
Course Code	CSC801							
Faculty Name:	Dipti Jadhav							
Year	4 Sem VIII		VIII					
CO Number		Course Outcome						
CSC801.1	Ability to kr	Ability to know concepts and strategies for making design decisions.						
CSC801.2	Ability to u	Ability to understand the importance of human psychology in designing good interfaces.						
CSC801.3	Apply Inter	Apply Interactive Design process in real world applications						
CSC801.4	Analyzing existing interface designs and user experience							
CSC801.5	Ability to Evaluate UI design and justify							
CSC801.6	Ability to do	o researd	ch in Machine Interaction D	esign and generate redesign ideas.				

Course Name:			DC				
Course Code			CSC802				
Faculty Name:		Dr. Amiya	a Kumar Tripathy				
Year	4	Sem	VIII				
CO Number				Course Outcome			
CSC802.1	Understan	d the ba	sic elements and concep	ots related to distributed system Technologies			
CSC802.2	Illustrate tl	he middle	ware technologies that s	support distributed applications such as RPC, RMI and Object based middleware			
CSC802.3	Analyze th	Analyze the various techniques used for clock synchronization and mutual exclusion					
CSC802.4	Demonstra	Demonstrate the concepts of Resource and Process management and synchronization algorithms					
CSC802.5	Demonstra	Demonstrate the concepts of Consistency and Replication Management					
CSC802.6	Apply Dis	tributed F	ile System to analyze va	rious file systems towards building large-scale distributed applications			

Course Name:			NLP				
Course Code							
Faculty Name:		Ph	iroj Shaikh				
Year	4 Sem VIII						
CO Number				Course Outcome			
CSDLO8012.1	Locate and	Locate and retrieve the knowledge of natural languages to step ahead for automated processing natural language text.					
CSDLO8012.2	Understan	Understand & contrast basics of word level analysis concept and techniques.					
CSDLO8012.3	Articulate	Articulate and implement syntax analysis of natural language text with various methodologies.					
CSDLO8012.4	Categorize	Categorize and illustrate semantic analysis of natural language text with various constructs.					
CSDLO8012.5	Assess pra	Assess pragmatic analysis with discourse and reference resolution.					
CSDLO8012.6	Build real	world NLI	applications such as mac	hine translation, text categorization, text summarization, information extractionetc.			

Course Name:	HMI LAB			
Course Code	CSL801			
Faculty Name:	Dipti Jadhav			
Year	4	Sem	VIII	
CO Number	Co			Course Outcome
CSL801.1	Ability to know concepts and strategies for making design decisions.			
CSL801.2	Ability to understand the importance of human psychology and abilities in designing good interfaces (Virtual Lab)			
CSL801.3	Apply HMI in their day-to-day activities			
CSL801.4	Ability to criticize existing interface designs, and improve them			
CSL801.5	Ability to Evaluate UI design and generating redesigning ideas			
CSL801.6	Design prototype for social and technical task.			

Course Name:	DC LAB			
Course Code	CSL802			7
Faculty Name:	Dr. Amiya Kumar Tripathy			
Year	4 Sem VIII		VIII	
CO Number	Course Outcome			Course Outcome
CSL802.1	Demonstrate basic knowledge of the elements and concepts related to distributed system Technologies			
CSL802.2	Apply the middleware technologies that support distributed applications such as RPC, RMI and Object based middleware			
CSL802.3	Analyze and implemnt techniques used for clock synchronization and mutual exclusion			
CSL802.4	Demonstrate the Resource and Process management Process in DS			
CSL802.5	Demonstrate the concepts of Consistency and Replication Management			
CSL802.6	Design and implement application programs on distributed systems.			

Course Name:	CCL			
Course Code	CSL803			
Faculty Name:	Ms. Priya Kaul			
Year	4	Sem	VIII	
CO Number				Course Outcome
CSL803.1	To understand different types of virtualization and increase resource utilization.			
CSL803.2	To demonstrate on demand application delivery over the web.			
CSL803.3	To apply and demonstrate various service models.			
CSL803.4	To analyze security issues on cloud			
CSL803.5	To develop real world web applications and deploy on commercial cloud.			
CSL803.6	To Build a private cloud using open source technologies.			

Course Name:	Computational Lab-II (NLP)			
Course Code	CSL804			
Faculty Name:	,			
Year	4	Sem	VIII	
CO Number	Course Outcome			
CSL804.1	To realize the basic techniques to build operational system			
CSL804.2	To understand the various programming constructs and tools used			
CSL804.3	To understand and use libraries and analyze the program flow			
CSL804.4	To apply the tools and constructs on complex problems			
CSL804.5	To Design and analyze a problem statement for solving real life problem			
CSL804.6	To implement and evaluate the design with respect to performance measures of the system designed			

Course Name:	Major Project-II]
Course Code	CSP805			
Faculty Name:	Ditty Varghese			
Year	4	Sem	VIII	
CO Number	Course Outcome			
CSP805.1	Students will be able to convert the design into a Product/Model/Prototype and validate the results.			
CSP805.2	Students will be able to execute the project plan and monitor progress and maintain deadlines.			
CSP805.3	Students will be able to summarize the work in the form of technical documentation following ethical practices.			