Sr.No.	Sem	Subject	Subject Code	Course Code (NBA)	CO No	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3		Co attainm ent
					C01	students will be able to formulate Computer engineering problems	2	2											1				0.6
		Applied Mathematics			CO2	Students will be able to apply theory of matrices to develop	2	2											1				0.6
1		-	FEC11	C211	CO3	students will be able to analyse Big data using statistical tools such	2	2 1											2				0.6
		1			CO4	ortial differential equations, optimization	2	2 1											2				0.6
					CO5	students will be able to solve problems signal and system electrical	2	2 1											2				0.6
					C01	constallography and score (Demomber)	3	2	2										3	1			0.59
		Applied Dhusies			CO2	comisee ductors based douises and technology. (Linderstand)	3	2	2										3	1			0.54
2		-	FEC12	C212	CO3	Students will be able to indistrate basic concepts of Pundamentals of	3	2	2										3	1			0.12
		1		-	CO4		3	2	2										3	1			0.12
					CO5	Structures will be able to evaluate various methods to design	3	2	2				2						3	1	1		0.5466667
	4				CO6	supersonductors	3	2	2										3	1			0.36
					C01	<ul> <li>i) Calculate the types &amp; percentage of impurities in water ii) Calculate various reagents required to soften hard water iii) Understand methods of purification of water as per the standards.</li> </ul>	3	2							2				3		1		0.34
		Applied Chamister			CO2	Understand the chemistry of polymers along with their applications.	3	2							2				3		1		0.296
3		Applied Chemistry - I	FEC13	C213	CO3	Understand mechanism of lubrication and its properties.	3	2							2				3		1		0.36
					CO4	Understand thermodynamics of chemical processes.	3	1											3				0.6
	1				CO5	Understand the process of manufacture of cement and Engineering materials.	3	1											3				0.12
1					C01	onuilibeium	3	2								2		-	3				0.6
					CO2	Determine the centroid of plane lamina	3	3							1			2	3		1		0.6
4		Engineering Mechanics	FEC14	C214	C03	Caluclate internal forces, moments and distributed loads in members Evaluate velocity, acceiration, time, force and energy of the particle as	3	3							1	2		4	3		1		0.6
					CO4	Locate intanshebus centre or rotaion for rigid badies having plane	3	3							1	2		1	3		1		0.5911111
	-				C05	motion	3	3	2	2	1	1			1	2		2	3	2	1		0.12
					C01	To reard and analyse DC circuits through network theorems.	2	2	2	2	1	1			1			2	3	3	1		0.544
5		Basic Electrical	FEC15	C215	C02	To study and understand single phase AC circuits.	2	2	1	2	1	1			1			1	3	2	1		0.52
-		Engineering			C04	To study and understand single phase transformer	3	3	1	3		2			1			1	3	2	1		0.550
					C05	To study electrical machines.	3	3	2	3	1	2	2		1			2	3	3	1		0.24
	1				C01	Illustrate Depleting Nature of Environmental Resources, Global	3	1	-		-	1	1		-			1	3	0	1		0.24
					CO2	Adapt to 3R (Reuse, Recovery, Recycle)	3	1	1				1					1	3	1	1		0.24
					CO3	Study different control measures related to Environmental Pollution	3	1	1		1	1	1					1	3	1	1		0
ь		Environmental studies	FEC16	C216	CO4	Illustrate and analyse various Case Studies related to Environmental	3					1	1					1	2		1		0
					CO5	Demonstrate the working of Renewable energy sources & Equipments	3	1	1			1	1					1	3	1	1		0
					CO6	Illustrate the Techniques of Disaster Management and Green Building	3	1	1		1	1	1					1	3	1	1		0
					C01	Develop Necessary skill required to handle fitting tools	3	2	3						2			1	3	1	1	11	3
		Basic Workshop																					
7		Practice	FEL11	C217																			
1		-																					
1								-															
					CO2	Able to identify basic networking components Students will be able to formulate lengineering problems such as Beta	3	2	3						2			1	3	1	1	11	3
					C01	and Gamma functions and its properties. Differentiation under	2	2		1									1	1			0.52
		Applied Mathematics	FFC21	(221	CO2	Students will be able to apply theory of Linear Differential Equation				1									1	1			J.5622857
Ů		Ű.	11021		r04	studience win be able to analyse "Numerical Solution of or manary	2	4		-	-								2	2			0.12
1					C05	Students will be able to relate the concepts of Multiple Integrals to		1		2	3								2	2			0.44
<u> </u>	1				C01	Studientis will de able to rotenti y orherent concepts related with	3	2	2	- 2	- '	-	1	-	-	-	-	-		1			0.52
					CO2	Students will be able to illustrate basic concepts of Laser.	3	2	2	-	-	-	-	-	-	-	-	-	3	1	- 1		
		Applied Physics			CO3	Students will be able to understand the Physics benind the working of	3	2	2	-	-	-	- 1	-	-	-	-	-	3	1			
9		- U	FEC22	C222	CO4	Student will be able to analyse the concepts related to quantum	3	2	2	-	-	-	-	-	-	-	-	-	3	1			
1					CO5	Students will be able to evaluate methods to measure ac, dc voltage,	3	2	2	-	-	-	2	-	-	-	-	-	3	1	1		
L	.				CO6	Students will be able to examine different methods to synthesise	3	2	2	-	-	-	-	-	-	-	-	-	3	1			0.472
					C01	Calculate the quantity of air and oxygen required for the complete combustion of fuels and carry out analysis of fuels.		3 2		2					2				3	1	1		0.4866667
		And load of the second			C02	Understand the mechanisms of corrosion, methods of preventing corrosion.		3 2							3				3		1		0.4533333
1		Applied Chemistry - II	FEC23	C223	CO3	Understand the properties and uses of various alloys.		2 1											2				0.5666667

1 1		1	1	1	r	1	r	-		1	1	1	1	1			1						
					CO4	Calculate atom economy by various methods of synthesis. Incorporate the knowledge of green synthesis of various chemicals								2	,				3		1		0.52
						or Breen shriness of various elements		3	2					3	2								0.52
					CO5	Understand the chemistry of composite materials.		2							3				1		1		
					C01	Understand the theory of projections, conventions and methods of	3	1										1	3		1		0.6
11	2	Engineering Drawing	FFC24	C224	CO2	Analysis	3	3	3						1	1			3	1	1		0.6
	-	Engineering brunning	· LCL+	CLLY	CO3	Apply concepts and logic to get solutions of the problem (Apply).	3	3	1										3	1			0.6
					CO4	sugge the approximate views depends upon given conditions in the	3	3	3						1	2			3	1	1		0.5911111
					CO1	To propose logical solution for given problem statement.	3	2	1										3	1			0.12
					CO2	Understand concept of data types ,variables and operators in C	3												2				0.54
12		Structured Programming	FEC25	C225	CO3	Implement conditional statements and looping construct in C	3	2	1										3	1			0.48
		Арргоасн			CO4	Synthesize a complete program by decomposing a problem into function	3	2	2										3	1			0.55
					CO5	Demonstrate the use of arrays and strings in C language.	3	2											3				0.52
					CO6	Explain the concepts of structures, files and pointers A graduate will be able to determine the fundamental concepts of	3	1											3				2.4
					CO1	effective communication and its application for personal excellence	3	1								3			3		1		3.00
						A graduate will be able to utilize the principles or effective business	-												-				2.90
12		Communication Skills	55026	6226	CO2	correspondence and the nuances of strategic letter writing for	3								2	3			2		1		3
15		Communication Skills	FEC20	C226	603	A graduate will be able to demonstrate a command over the art of	2								2	2			2				
						extisination in placements and competitive evams	3								2	5			2		1		3
					CO4	A graduate will be able to formulate definitions, instructions,	2	1								3		1	2				i i
					CO1	descriptions and explanations of technical writing.	2		2						2			1	2	1	1	11	2.88
					C01	Demonstrate the wiring practices for the connection of simple wiring la	3	2	2						2			1	2	1	1	11	- 3
		Basic Workshop				Demonstrate the winnig practices for the connection of simple winnig it	- 3	2	3						2				3	1	1	11	- 3
14		-	FEL21	C227																			
		н																					1
						Students will able to solve initial and boundary value problems involving																	0.0
					CO1	ordinary differential equation(Institute)	2												1				0.6
						Students will be able to calculate both real and complex form of Fourier																	
		Applied Mathematics III	I		CO2	series for standard periodic waveform and Fourier Integrals(Institute)	2												1				0.6
						Students will be able determine the derivative of a complex function,	2	-															0.0
					03	Students will be able to solve the line integrats using Stoke is meanem	2	1	_		2	-	-						2				0.6
					CO4	Understand The concepts or Various components to design stable analog	2	1			5								2	1			0.0
					601	Represent numbers and perform arithmetic operations	3	2	-	_	_								2				1.107
		ANALOG AND DIGITAL			(03	Minimize the boolean expression using boolean algebra and design it		2											1				1.22
		CIRCUITS			CO4	Analyze and design combinational circuit		-	2										-	1			1 32
					C05	Design and develop sequential circuits			2		-									1			1 18
					CO6	Translate real world problems into digital logic formulations using VHD	3				3								2	1			1
					CO1	Select appropriate data structures as applied to specified problem	5		1											1			0.8
					CO2	Cearning different searching, insertion, deletion and traversing	2		3										1	1			0.8
		Data Structures &	ITC33		соз	Understanding different Linear data structures.	2		2										1	1			0.8
		Analysis			CO4	Apply			2											1			0.8
					CO5	Implement different Non-Linear data structures like Trees and Graphs.	2		2										1	1			0.8
	ш				CO6	Determine and analyse the complexity of given Algorithms.		3		2									2	1			0.8
					CO1	Understand the fundamentals of a database systems	3												2				0.44
					CO2	Design and draw ER and EER diagram for the real life problem	3	3	3										3	1			0.547
		Database Management			CO3	Convert conceptual model to relational model and formulate relational	2	3	3										3	1			0.6
		System			CO4	no ennance knowledge to advanced SQL topics like embedded SQL, proceduras connectivity through IDPC	3	3	3		2								3	2			0.6
					CO5	Formulation and retrieval of data from database using SQL	3	3	3										3	1			0.453
					CO6	management, concurrency, control, storage and indexing)	2												1				0.52
					CO1	Students will be able to analyze Analog Communication System (Analyze)	2	2											3				0.328
					CO2	success will be able to evaluate the innuence of noise in communication existence and prove the properties of Equilier transform (Evaluate)	2	2	-										3				0.36
		Principles of Analog and	SEITC36		CO3	Students will be able to design AM & FM systems (Design)	2	2	3								L		3	1			0.533
		Digital Communication			CO4	Students will be able to analyze uniferent pulse modulation reconfiques	2	2	2										3	1			0.52
					CO5	Students will be able to describe various bandbass modulation schemes	3	_	1										2	1			0.56
					CO6	(Dentify Classes, opiects, members of a class and relationships among	3	-	-										2				0.6
					CO1	the product of the able to write Java application programs using OUP	3	2	2		-				-	-			3	1			2.2
		Object Oriented			CO2	Students will be able to solve computational problems using basic	3	2	2		+	+	-				+		3	1			1.84
		Programming	SEITC33		CO3	Students will be able to abbly concepts of inheritance and for code	2	1	1	_	-	-			-	-			2	1			2.8
		Methodology			CO4	The students will be able to demonstrate programs on Abstract classes,	3	2	2		+								3	1			2.2
					C05	Studehts will be abre to develop various GUI applications usings Swings	2		2		+												2.8
			+		0.06	Students will able to calculate Eigen value and Eigen vector, and	3	2	2		+								3	1			1.96
					01	รงบอร์เกต พริศาษธ์ เช่ามีการสามสาร เว้าหลายหนึ่ง เห็นสามาร์ เกิดออกสาร	2				+								1				3
		Annlied Mathematics-IV	/ ITC41	l I	CO2	and Caushuls integral formula racidus theorem and neuror cories	T					1							1				3

	Applied Mathematics-14	1044		Student will able to determine appropriate sample test and sample				1	1				1						-
			CC	D3 cite for optimation whereas population man and a company	2										1				3
			CC	24 Using Big M Duplibus, and Duplicimplay mathed	3	1	2	3							3	2			2.4
			CC	D1 Understand principles of LAN design such as topology and configuration	3			3							2	1		· · · · ·	1.32
			co	Describe various design performance issues like different type of network .	2										1				1
	Computer Networks	TC 42	0	Ability to understand network industry standards such as the USI & TCP	-	2 2									1	1		i tit	1 336
				madale Douting Destacole Address Desclution and Douges Address		2 5		2			-					1		F	1 247
				Ability to work with network tools and analyze the performance				2								I	<u>⊢−−−−</u>	<b>└──</b> ┤ <sup>:</sup>	1.547
			co	D5 Ability to understand the working of network operating system.	1										1				1.2
			CC	D1 Ability to understand basic organization of computer	2										1				1.96
			CC	22 Ability to apply computer antimetic operations on integer and real	3	2									3		1 1		2.118
	Computer Organization		co	Ability to understand processor organization and compare performance	1	2 2									2	1		· ·	1.96
	and Architecture		co	Ability to understand memory organization of computer	1	2 2									2	1			2.16
			c	D5 Ability	2										1			· · ·	1.96
					- 1	2									2			F F	1.06
IV				To learn fundamentals of Regular and Context Free Grammars and	1	2					-				2		L	<b>⊢</b> ;	1.50
			CC	10 understand the relation between Regular Language and Finite	3										2		<u>↓                                    </u>	<b>└──</b> ┤	1.4
			CC	D2 Automata and machings	3										2				1.286
	Automata Theory	ITC44	CC	D3 Teorelatore	3	1									3				1.4
	Automata meory 5		CC	D4 The relation between Contexts free Languages, PDA and	2	1 3									2	1	1 1	1	1.32
			CC	D5 To design PDA as acceptor and TM as Calculators.	2	2 2									3	1		· · ·	1.24
			c	D6 To learn how to co-relate Automata's with Programs and Functions.	1	1								1	1				1.4
			0	C1 Student will be able to learn basics of web application development	2	2 1								-	3	1			2 9/7
				Student will be able to learn various client side and server side web	2	2 2									2	1		⊢ – ť	2.0547
	WEB PROGRAMMING			Student will be able to create the web application using technologies	2	2 3									3		<u>⊢</u>	<b>⊢</b> +'	2.950
			<u> </u>	03	2	3 3									3	1	<u>↓                                    </u>	<b>└──</b> ┤′	2.967
			CC	D4 side to check addubate connectivity with validas server	1	2 3									2	1			2.92
			CC	D1 Control of students to understand true meaning of information and	1	1									1			( )	J.566
			CC	22 Ability of students to understand and apply compression technique in	2	1									2		1 1	1 1	J.6
	ITC		CC	D3 Ability of students to understand and apply error correction techniques	2	1									2			1	0.54
			CC	Ability of student to understand now unique code is generated using	3	1									3			1	0.6
			0	Ability of student to understand now to implement secure	2										1			0	0.52
			0	Communication	2										1		ł	ř – – – – – – – – – – – – – – – – – – –	1 96
	Computer Complianced			Choose appropriate algorithm for line drawing, line clipping, polygon	2	2									2		I	t t	2.50
	Virtual Reality	ITC51		J2 clination and not soon filling	<u> </u>	2									3		<u>⊢</u>	<b>⊢</b> +'	2.2
	virtual iteality			J3 Solve 2D and 3D Transformation problems. To design and implement an application with the principles of virtual.	3	2									3		<u>↓</u>	<b>└──</b> ┼́	2.2
			co	24 Stalidate will be able to describe the main objectives and lubctions of	1	2 3									2	1		L +	2.2
			CC		3										2				3
	ODEDATING SYSTEMA	ITCE2	CC	D2 Students will be able to determine the organization of PC components	3	2	2								3	1			3
	OF ERATING STOTEM T	11032	CC	D3 Students will be able to examine now the operating system is responsible	3	2	2								3	1	1 1	1	3
			CC	D4 Students will be able to analyze the performance of various memory	3	2	2								3	1		· ·	3
			co	Students will be able to learn the concepts and architecture of	2										1				1.8
			0	2 Students will be able to understand the basics of microcontroller 851	3										2				1 32
	MICROCONTROLLER			Students will be able to anderstand the basics of microcontroller of the students will be able to apply the concepts of microcontroller	1	2									2		I	└─── <sup>↓</sup>	1.52
	AND EMBEDDED	TC 55		J3	1	2					_				2		<u>⊢</u>	<u>⊢</u> ;	1.10
	SYSTEMS		CC	04 Students will be able to learn the concepts of ARM7 architecture.	2										1		<u>↓                                    </u>	<b>└──</b> ┤	1.133
			CC	D5 Students will be able to analyse various real-time operating system	1										1				1.16
			CC	D6 ombadded customs application	1										1				1.24
			0	On the completion of the course, students will be able to construct	3	2		1							3		1 1		11
				complex queries using SQL to retrieve and manipulate information in a	-	-		-								1	<u>⊢−−−−</u> ]	<b>⊢</b>	
			CC	D2 On the completion of the course, students will be able to design and	2										1		1 1	1	1.2
				Clearly understand how databases are actually stored and accessed: How	_		-										I	<u> </u> +	
		1014	CC	D3 transaction ACID properties are maintained and how a database recovers	2		2								1	1	1	1 1	1.167
	AUBINS	1054	~	On the completion of the course, students will be able to Apply security	2		1								2			-+	1 24
			CC	D4 controls to avoid any type of security incidents on vital database systems.	3		1								2	1			1.24
v			0	On the completion of the course, students will be able to Design		2									1				12
				advanced data systems using Object based systems or Distributing		2											l	<b>└──┤</b>	1.2
			co	D6 Understand the importance of enterprise data and be able to organize	1										1		1 1	1	1.187
				Design a technical document using presica language suitable vesebulary													<u>├</u> ───┤	<b>⊢</b> −−+	
			CC	D1 and ant style	3	1						3		1	3		1 1	1 1	2.4
			-		<u>ז</u>				1	1	2	2						-+	2.4
	DUCINECC			J2 .	2					1	Z	3			1		1	1	2.4
	COMMUNICATION AND T	ITC56	~	Demonstrate awareness of contemporary issues knowledge of	3					3	1	3			2				24
	ETHICS			professional and ethical responsibilities.	J					5	-	5			<u> </u>		<u> </u>	⊢l'	
			co	D4 Apply	3						2	3		1	2			r I	2.4
		- I	-+	Deliver formal presentations off-stick-involvementing the set of the				+	-	-	+	-			-			⊢ <sup>−</sup>	
			co	D5 Deliver formal presentations effectively implementing the verbal and non-	3			2			1	3			2	1	1 1	1 1	3
				Understand the fundamental concepts of open-source operating system	2			2										-+	0.46
				Linux	3			2							2	1	!	[ <sup>r</sup>	J.16
				Learn and execute the basic set of commands and editors in Linux	3										2		II	1	0 22
				operating system.	5	L											l	<b>⊢</b> `	
			co	D3 Implement user and system administration in Linux	3										2		1 1	1 1	0.4
		11055							1		-	1						· · · · · ·	

	051	TEITESS		CO4	Use the features of the Linux Server Applications.	2	3	2										3	1		0.364
				CO5	Write, test and debug the shell scripts to perform various tasks using conditional constructs, while and for loops.				2		2								1	1	0.3
				CO6	Describe Android platform, architecture and features.		3											2			0.32
				CO1	Define various software application domains and remember different	3												2			0.17
				CO2	Explain needs for software specifications also they can classify different		2											1			0.48
				соз	Convert the requirements model into the design model and demonstrate									3						1	0.44
	Software Engineering	ITC61		CO4	Distinguish among SCM and SQA and can classify different testing				1					-						1	0.48
				CO5	strategies and tactics and compare them Justify role of SDLC in Software Project Development and they can		2		-									1	1		0.6
				cos	evaluate importance of Software Engineering in PLC Generate project schedule and can construct, design and develop		2									2					0.0
				COB	network diagram for different type of Projects. They can also organize Student will gains clear understanding of fundamental principles of	-										3				1	0.6
				CO1	Distributed Systems	2	1											2			0.531
				CO2	- procedure call and Remote method invocation (RPC and RMI) along	2				3								1	1		0.488
	Distributed Systems	TEITC62		CO3	Student will understands importance of consistency and replication in Distributed Operation	2												1			0.44
				CO4	Students are emphasized on developing applications using current distributed computing technologies like EJB, CORBA and .NET.		1			3								1	1		0.3
				CO5	Students		1			3								1	1		0.34
				CO6	Student will able to explain design and implementation of key mechanisms. Clock Synchronization, Election Algorithms, Mutual	3	1											3			0.487
				CO1	Understand the key concepts and goals of security	3												2			2.88
				CO2	Explain the basic idea behind access control and compare the various	3												2			2.872
VI				(03	Explain the need for security protocols and use them on Internet-based	2												1			2 92
	System and Web Security	TEITC63		604	applications; Build firewalls and intrusion detection systems and demonstrate their	2				2								1			2.02
				C04	working. Explain malicious software and typical software solutions used in dealing	2			-	2									1		2
				cos	with virusesand worms; Understand and explain various issues related to program security and	1												1			3
				CO6	web security	2												1			2.76
				CO1	principles of business intelligence	2	2											3			3
				CO2	Organize and Prepare the data needed for data mining using pre pre- processing techniques and perform exploratory analysis on it	2												1			2.943
	DATA MINING AND BUSINESS INTELLIENCE	ITC64		СОЗ	Design and Implement the appropriate classification data mining techniques and apply merics of measures on it	3	3	1		3								3	2		2.99
				CO4	Apply the appropriate clustering data mining techniques and perform outlier analysis	3	3	1		3								3	2		2.92
				CO5	Implement the appropriate Assoiation mining data mining techniques	3	3	1		3								3	2		2.867
				CO1	Student is able to develop Keyword Generation, Using Google Analytics	3		2		3								2	2		0.6
				CO2	Student is able to apply Responsive Web Design.	3	2	3										3	1		0.44
				соз	Student	3	2	2										3	4		0.52
	TECHNOLOGY	TEITT65		CO4	Student is able to understand concepts in SEQ	3												2	1		0.52
				C05	Student	3		3										2			0.6
				CO6	Student is able to demonstrate advanced topics of HTML5_CSS3	3		3										2			0.564
				CO1	student will be able to recall the reasons for Software Project failures.	3		-				2	2				2	2	1		2 12
					Remember	5	2	2				2	2	2		2	2	2		1	2.12
				C02	Students will be able to initiate new software project. Apply		3	3						2		3		2	1	1	2.2
	SOFTWARE PROJECT MANAGEMENT	BEITC71		CO3	Students will be able to develop work break down structure. Analyze			-	3							-			1		2.8
				CO4	Create			3						2	3	2			1	1	2.8
				CO5	Students will be able to Prepare project Estimate			2		2		2				2			2	1	2.8
	L			CO6	Students will be able to identify need of project	3	3	3									3	3	1	1	2.8
				CO1	Students snould be able to define Cloud Computing and memorize the different Cloud service and deployment models	2	2	1										3	1		2.16
				CO2	Students should be able to describe importance of virtualization along with their technologies.	2	2	2	1									3	1		2.13

			соз	Students should be able to use different cloud computing and mobile 2	1									2			1.92
	Cloud Computing	ITC72	CO4	Students should be able to analyze the components of open stack & 2	1	1								2	1		2.8
			CO5	Students should be able to describe components of Amazon web	1	3	1							2	2		1.96
			CO6	Students should be able to Design & develop backup strategies for cloud 2	1	1								 2	1		1.92
			C01	Students will develop a basic understanding of the building blocks of Al				2						 2	1		2.14
			CO2	Students will be able to examine and choose an appropriate problem-									 	 2			2.733
			соз	Solving method and knowledge-representation scheme. Student will able to understand and design solution for games 3										2			2
	Intelligence System	ITC73	 CO4	Students will develop an ability to plan and formalize the problem 2	3	2								 3			2.667
			 CO5	Student will able to understand importance of uncertainty in Al	-		2		2					 -		1	2.12
			 CO6	Students	3									 2			2.16
VII			C01	Describe 3										 2			2.973
			 CO2	Explain the multiple radio access techniques and multiuser detection		2											2.68
			 соз	techniques Understand various wireless networks and their technologies 2										 1			2.82
	WIRELESS TECHNOLOGY	ITL71	 CO4	Understand the multiuser detection techniques													2.973
			CO5	Simulate methods for real world problems in implementing wireless		2										ł	3
			CO6	solution Understand need of securities and economies in wireless systems		-	1	1									2.88
			C01	Students 3	2	3	-	-						 3			2.12
			 c02	Students will be able to apply the knowledge gained and modern	3	3								 2			2 12
			 c03	engineering tools in their application domain Students will be able to Identify the e-business model	2	3								 3			2.22
	E-COMMERCE AND - BUSINESS	BEITC753	 co4	Students will be able to compare e-payment and e-marketing along with a	-	3								 2	1		2.2
			cor	promotional strategies.		2								 2	1		2.104
			 	develop e-commerce and e-business website 5		3							 	 2	1		2.0
			CO6	Students will able to learn the various E-business strategies 3 To understand the fundamental concepts of a dioital image processing		2								 2	1		2.16
			CO1	System 3			_							 2			2.88
			CO2	Techniques	2									 1			3
	Image Processing	BEITC751	CO3	To understand and apply various image Transforms	_		2								1		2.88
			CO4	Processing.			3								1	ł	2.86
			CO5	To apply various segmentation and object description techniques	2									 1			2.617
			CO6	To study Color Models and various applications of image processing		2									1		2.52
			 CO1	to understand logical and physical components of a storage and identify components of managing & monitoring the		2								1	1		3
			CO2	to evaluate storage architectures, including storage subsystems, san, nas, and ip-san, also define backup, recovery.	2									1			3
	SNAAD	DEITC91	соз	to examine emerging technologies including IP-SAN	2									1			3
	SINIVIR	BEIICBI	CO4	to define information retrieval in storage network and identify different storage virtualization technologies.		3									1		3
			CO5	to understand the backup and recovery techniques 2										1			3
			CO6	to understand algorithms of information retrieval in storage network	2									1			2.88
			CO1	Student will be able to: Explain the motivation for big data systems and identify the main sources of Big Data in the real world	2									3	1		3
			CO2	Demonstrate an ability to use frameworks like Hadoop, NOSQL to efficiently store retrieve and process Bin Data for Analytics	2									2			2.92
			соз	Implement several Data Intensive tasks using the Map Reduce Paradigm	2	2								1	1		2.84
	BIG DATA ANALYTICS	ITC81	CO4	Apply several newer algorithms for Clustering, Classifying and finding	2	2								 1	1		2.714
			CO5	Apply algorithms to analyze Big data like streams, Web Graphs and Social	2	2								 1	1		2.947
			 CO6	Design and implement successful Recommendation engines for 1	2	3								2			2.88
			1	enterprises.	1	1	1	1	1	1	1	1					1

					Final PO / Pso Attainment	1.67	1.70	1.82	1.71	1.71	0.92	1.10	2.41	1.68	2.33	2.13	1.57	1.68	1.75	1.54	
					Indirect tools	2.74	2.81	2.78	2.80	2.79	2.65	2.79	2.79	2.83	2.80	2.81	2.67	2.78	2.79	2.80	
					PO/PSO Attainment via CO	1.40	1.42	1.58	1.44	1.44	0.49	0.68	2.31	1.39	2.21	1.96	1.29	1.41	1.49	1.23	
					PO/PSO Attainment via CO - FE	0.73	0.65	0.86	0.44	0.38	0.25	0.24		1.18	1.90		0.93	0.72	0.58	0.92	
				CO6	The students will be able to discuss different software quality models to understand different quality standards	2												1			2.2
				CO5	Familiar with the open source testing tools.					2									1		2.2
				CO4	Provides practical knowledge of a variety of ways to test software and an understanding of some of the trade-offs between testing techniques.			3											1		2.2
	STOA	BFITC846		соз	Apply the software testing techniques in commercial environments				2										1		2.16
				CO2	Implement various test processes for quality improvement			2											1		2.167
				CO1	Identify the reasons for bugs and analyse the principles in software testing to prevent and remove bugs.	3												2			2.16
				CO5	Examine the genetic algorithms and their applications.	3	1											3			2.92
				CO4	Demonstrate the efficiency of neuro-fuzzy hybrid system.		1											1			2.76
	Soft Computing	BEITC845	5	CO3	Define the fuzzy systems and analyze the working of controllers.	3	3			1								3	1		2.99
				CO2	Analyze various neural network architectures.	3				1								2	1		2.944
				CO1	Learn about soft computing techniques and their applications.	1												1			3
				CO6	Students	1	2	3										2	1		1.96
				CO5	Students will be able to analyze and fit the collected data to different distributions.	3	2	2										3	1		2.12
	and Modeling	5211005		CO4	Students will be able to define random variate generators for finite random variables .	3	2	2										3	1		1.96
VIII	Computer Simulation	BEITC83		СОЗ	Students will be able to analyze events and inter-arrival time, arrival process, queuing strategies, resources and disposal of entities.	3	2											3			2.131
				CO2	Students will be able to identify the common applications of discrete- event system simulation.	3	2											3			2.12
				CO1	Students will be able to understand the meaning of simulation and its importance in business, science, engineering, industry and services.	2												1			2.2
1		1	1	1		1	1	1	1	1		1					1		1		

						CO Attainm	ent using CI	E			CO Weight	age		Final CO att	ainment		Overall Att
Sr.No.	Sem	Subject	Subject Code	CO No	Course Outcomes							Ĭ		Internal	External	Final	
		,	,			IA1	IA2	IA Avg	EXPT	Assign	IA	EXPT	Assign	20	80	100	
					Students will be able to formulate. Computer engineering problems such as linear system of												
				CO1	equations non linear system of equations using numerical methods		3	3		3	80		20	3	0	0.6	
					Students will be able to apply theory of matrices to develop algorithms for many											0.0	
		Applied		CO2	engineering applications		2	2		2			20	2	0	0.6	
1		Mathematics	FEC101	CO3	Students will be able to analyze. Pig data using statistical tools such as fitting of survey	2	3	2		3	90		20	2	0	0.0	
-		-	120101	005	Students will be able to analyse big data dsing statistical tools such as intring of curves	3		5		3	00		20	5	0	0.0	
		I I		CO4	orguntions antimization						0		20		0	0.6	
					Equations, optimization		3	5		3	0		20	3	0	0.0	
				CO5	siduents will be able to solve problems signal and system electrical networks, control								20			0.6	0.6
					Students will be able to identify different concents related with crystallography, and y rays			5			00		20	5	0	0.0	0.0
				CO1	(Personal of the second of the	2 975		2 075				10	20	2.05		0.50	
					Students will be able to understand the Physics behind the working of semiconductor based	2.075		2.875			40	40	20	2.55	0	0.55	
				CO2	devices and technology (Understand)		2 25	2 25	2	2	1	10	20	27	0	0.54	
		Applied Physics		-	Students will be able to illustrate basic concents of Eurodamentals of Quantum Mechanics in	-	2.23	2.25					20	2.7	0	0.54	
2		-	FEC102	CO3	ongineering					3	40	40	20	0.6	0	0.12	
		I		CO4	Students will be able to examine different methods to generate ultrasonic waves					3	40	40	20	0.0	0	0.12	
													20	0.0	0	0.12	
				CO5	Students will be able to evaluate various methods to design acoustically correct auditorium.		2 33333333	2 33333333	3	3	40	40	20	2 73333333	0	0 54666667	
				CO6	Student will be able to analyse the concents related to superconductors		2.00000000	2.00000000		3	40	40	20	1.8	0	0.36	0.38
					i) Calculate the types & percentage of impurities in water ii) Calculate various reagents								20	1.0	0	0.50	
				CO1	required to soften hard water iii) Understand methods of nurification of water as per the												
		Applied		001	standards	2 75		2 75	0	3	40	40	20	17	0	0 34	
3		Chemistry	FEC103	CO2	Understand the chemistry of polymers along with their applications	2.75	2.2	2.13	0	3	40	40	20	1.48	0	0.296	
5		-		CO3	Understand mechanism of Jubrication and its properties	3	2.2	2.2	0	3	40	40	20	1.40	0	0.250	
		I		CO4	Understand thermodynamics of chemical processes		3	3	, °	3	80		20	3	0	0.6	
	1			CO5	Understand the process of manufacture of cement and Engineering materials			5	0	3		80	20	0.6	0	0.0	0 34
				CO1	Construct free body diagram and calculate the reactions for static equilibrium	3		3	3	3	40	40	20	3	0	0.6	
				CO2	Determine the centroid of plane lamina	3		3	3	3	40	40	20	3	0	0.6	
		Engineering		CO3	Caluclate internal forces moments and distributed loads in members	3		3	3	3	40	40	20	3	0	0.6	
4		Mechanics	FEC104			-		-	-	-				-	-		
				CO4	Evaluate velocity, accelration, time, force and energy of the particle as well as rigid body		2.88888889	2.88888889	3	3	40	40	20	2.95555556	0	0.59111111	
				CO5	Locate intansneous centre of rotaion for rigid badies having plane motion					3	40	40	20	0.6	0	0.12	0.5
				CO1	To learn and analyse DC circuits through network theorems.	2.3		2.3	3	3	40	40	20	2.72	0	0.544	
				CO2	To study and understand single phase AC circuits.		2	2	3	3	40	40	20	2.6	0	0.52	
5		Basic Electrical	FEC105	CO3	To study and analyse three phase AC circuits.		2.2	2.2	3	3	40	40	20	2.68	0	0.536	
		Engineering		CO4	To study and understand single phase transformer.				3		40	40	20	1.2	0	0.24	
				CO5	To study electrical machines.				3		40	40	20	1.2	0	0.24	0.42
	1				Illustrate Depleting Nature of Environmental Resources, Global Environmental Crisis,												
				01	Ecosystem concept	2.5		2.5			80	0	20	2	0	0.4	
		Cauling and a stal		CO2	Adapt to 3R (Reuse, Recovery, Recycle)	1.5		1.5			80	C	20	1.2	0	0.24	
6		Environmental	FEC106	CO3	Study different control measures related to Environmental Pollution		0	0			80	0	20	0	0	0	
		studies		CO4	Illustrate and analyse various Case Studies related to Environmental Legislation									0	0	0	
				CO5	Demonstrate the working of Renewable energy sources & Equipments		0	0			80	0	20	0	0	0	
				CO6	Illustrate the Techniques of Disaster Management and Green Building		0	0			80	0	20	0	0	0	0.11
				CO1	Develop Necessary skill required to handle fitting tools				3			100	)	3	0	3	3
		Basic Workshop		CO2	Able to identify basic networking components				3			100	)	3	0	3	
7		Practice	EEL 101														
/		-	FLLIVI														
		I															
				CO1	Students will be able to formulate engineering problems such as Beta and Gamma functions												
					and its properties. Differentiation under integral	2.5		2.5		3	80	0 0	20	2.6	0	0.52	
		احتا معر		CO2	sign with constant limits of integration.	2.8		2.8		2.85714286	80		20	2.81142857	0	0.56228571	

		Mathematics		СОЗ	Students will be able to apply theory of Linear Differential Equation of first order and second											
8		-	FEC201		order to develop algorithms for many engineering applications.				3	80	0	20	0.6	0	0.12	
				CO4	Students will be able to analyse Numerical solution of ordinary differential equations of first										1	
					order and first degree.		2	2	3	80	0	20	2.2	0	0.44	
				CO5	Students will be able to relate the concepts of Multiple Integrals to Evaluation of double										1	
					integrals by changing the order		2.5	2.5	3	80	0	20	2.6	0	0.52	0.43
				CO1	Students will be able to identify different concepts related with Interference and										1	
					Diffraction.(Remember)										┢────┤	
		Applied Physics		- 02	Students will be able to illustrate basic concepts of Laser.										┢────┤	
٩		Applied Thysics	EEC202	CO3	(Linderstand)										1	
5			120202	CO4	Student will be able to analyse the concents related to quantum mechanics										r†	
					Students will be able to evaluate methods to measure ac. dc voltage frequency										r+	
				CO5	measurement and working of CRO.										1	
				CO6	Students will be able to examine different methods to synthesise Nano materials.	2.5		2.5	3 0.8	40	40	20	2.36	0	0.472	
				CO1	Calculate the quantity of air and oxygen required for the complete combustion of fuels and carry out analysis of										i	
		Applied			fuels.		2.75	2.75	3 0.66666667	40	40	20	2.433333333	0	0.48666667	
		Chemistry	== 00.00	CO2	Understand the mechanisms of corrosion, methods of preventing corrosion.		2.5	2.5	3 0.33333333	40	40	20	2.26666667	0	0.45333333	
10		- '	FEC203	CO3	Understand the properties and uses of various alloys.	3		3	3 0.66666667	40	40	20	2.533333333	0	0.50666667	
		Ш		CO4	various chemicals				3 1		80	20	2.6	0	0.52	0.49
				CO5	Understand the chemistry of composite materials.										i – – – – – – – – – – – – – – – – – – –	
				CO1	Understand the theory of projections, conventions and methods of projections.	3		3	3 3	40	40	20	3	0	0.6	
	2	Engineering		CO2	Analysis of exact position of point/line/solid object by visualization (Analyse).	3		3	3 3	40	40	20	3	0	0.6	
11		Drawing	FEC204	CO3	Apply concepts and logic to get solutions of the problem (Apply).	3		3	3 3	40	40	20	3	0	0.6	
		Drawing		CO4	ludge the approximate views depends upon given conditions in the question (Evaluate)										1	
							2.88888889	2.88888889	3 3	40	40	20	2.95555556	0	0.59111111	0.6
				C01	To propose logical solution for given problem statement.				3	40	40	20	0.6	0	0.12	0.77
		Structured		002	Understand concept of data types ,variables and operators in C	2.25		2.25	3 3	40	40	20	2./	0	0.54	
12		Programming	FEC205	CO3	Implement conditional statements and looping construct in C	1	2	1.5	3 3	40	40	20	2.4	0	0.48	
		ApproacH		C04	Synthesize a complete program by decomposing a problem into function.		2.4	2.4	3 3	40	40	20	2.76	0	0.55	
				C05	Evolution the concepts of structures files and pointers		2	2	3 3	40	40	20	2.6	2	0.52	
				00			5	5	3 3				0	3	2.4	
				C01	A graduate will be able to determine the fundamental concepts of effective communication										1	
				01	and its application for personal excellence and in professional and social situations.	3	25	2 75	3	8000%	0	2000%	2.8	3	2 96	
					A graduate will be able to utilize the principles of effective business correspondence and the		2.5	2.75		000070		2000/0	2.0	5	2.50	
		Communication		CO2	nuances of strategic letter writing for meeting various organizational needs.		3	3	3	8000%	0	2000%	3	3	3	
13		Skills	FEC206		A graduate will be able to demonstrate a command over the art of comprehension,											
				CO3	summarization and word power for successful participation in placements and competitive										1	
					exams.		3	3	3	8000%	0	2000%	3	3	3	
				CO4	A graduate will be able to formulate definitions, instructions, descriptions and explanations											
				0.04	of technical writing.		3	3		8000%	0	2000%	2.4	3	2.88	2.96
				CO1	Develop Necessary skill required to handle Carpentry tools				3		100		3	0	3	3
		Basic Workshop		CO2	Demonstrate the wiring practices for the connection of simple wiring load				3		100		3	0	3	
14		Practice	FEL201												⊢−−−−	
		-													┢────┤	
															┢────┤	
					Ctudents will able to calve initial and boundary value problems involving ordinary differential											
				CO1	students will able to solve initial and boundary value problems involving ordinary differential	3.00		3.00	3.00	80.00		20.00	3.00	0.00	0.60	
				CO2	Students will be able to calculate both real and complex form of Fourier series for standard	3.00		3.00	3.00	80.00		20.00	3.00	0.00	0.60	
1		Applied													<u> </u>	0.60
T		Mathematics III		602	Students will be able determine the derivative of a complex function, state and prove		2.00	2.00	2.00	00.00		20.00	2.00	0.00	0.00	0.00
				COS	properties or derivatives. Derive Caucity's memanin equations and identifying whether a		3.00	3.00	3.00	80.00		20.00	3.00	0.00	0.00	
		1			complex function is complex uncreatingular at a point(institute)										1	

	1	I I	1		Chudente will be able to achie the line integrals wing Chelo/a Theorem and Casers Theorem							1					1
				CO4	and surface integral using Gauss divergence Theorem(Institute)		3.00	3.00		3.00	80.00		20.00	3.00	0.00	0.60	
				CO1	Understand the concepts of various components to design stable analog circuits		0.33	0.33	3.00	3 00	40.00	40.00	20.00	1 93	1.00	1 10	1 10
				CO2	Represent numbers and perform arithmetic operations	0.75	0.55	0.55	3.00	3.00	40.00	40.00	20.00	2 10	1.00	1.15	1.15
		ANALOG AND		CO3	Minimize the Boolean expression, using Boolean algebra and design it using logic gates	2 25		2 25	3.00	5.00	40.00	40.00	20.00	2.10	1.00	1.22	
2		DIGITAL		CO4	Analyze and design combinational circuit	2.25		2.2.5	3.00	3.00	40.00	40.00	20.00	2.10	1.00	1.22	
		CIRCUITS		0	Decign and develop sequential circuits	2.00	1 75	1 75	2.00	5.00	40.00	40.00	20.00	1.00	1.00	1.52	
				005	Translate real world problems into digital logis formulations using VILDI		1.7.5	1.75	3.00	2 00	40.00	40.00	20.00	1.50	1.00	1.10	
				C08	Coloct appropriate data structures as applied to specified problem definition	2.67	1.00	2.67	2 00	3.00	40.00	40.00	20.00	0.00	1.00	0.00	
					Select appropriate data structures as applied to specified problem definition.	2.07	2.00	2.07	5.00	3.00				0.00	1.00	0.00	
		D		02	Learning different searching, insertion, deletion and traversing mechanism.	3.00	3.00	3.00		3.00				0.00	1.00	0.80	
3		& Analysis	ITC303	CO3	Apply appropriate certing (cearching technique for given problem	2.50	3.00	3.00	2 00	3.00				0.00	1.00	0.80	0.80
		& Analysis		CO4	Apply appropriate solung/searching technique for given problem.	2.50	2.00	2.75	2.00	2.00				0.00	1.00	0.80	
	3			005	Determine and analyse the complexity of given Algorithms		3.00	3.00	3.00	3.00				0.00	1.00	0.00	
	Ĵ			C08	Understand the fundementals of a database systems	1.00		1.00	2 00	3.00	40.00	40.00	20.00	2.20	0.00	0.00	
					Design and drew CD and CCD diagram for the analytic marking	1.00		1.00	3.00	3.00	40.00	40.00	20.00	2.20	0.00	0.44	
		Database		602	Convertion of a weight and the value of a second second for the problem	2.55	2.00	2.33	3.00	3.00	40.00	40.00	20.00	2.75	0.00	0.55	
4		Management		CO3	To enhance knowledge to advanced SQL topics like embedded SQL, procedures connectivity	3.00	3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	0.00	0.60	0.53
		System		C04	Absorb IDDC	3.00	2.67	3.00	3.00	3.00	40.00	40.00	20.00	3.00	0.00	0.60	
				005	To demonstrate the advanced concepts in Delvis (like transaction mangement, concurrency		2.07	2.07	3.00	2 00	40.00	40.00	20.00	2.27	0.00	0.45	
				C00	Students will be able to apply a Appleg Communication System (Apply 76)	2.60	2.00	2.00	5.00	2.00	40.00	40.00	20.00	2.00	0.00	0.52	
		Principles of			Students will be able to analyze Analog Confindincation System (Analyze)	2.00		3.00		3.00	40.00	40.00	20.00	1.04	0.00	0.35	
				CO2	the answer of Ferning to design AM & FM systems (Design)	2.00	2 3 3	2 17	3.00	3.00	40.00	40.00	20.00	2.67	0.00	0.50	
5		Digital	SEITC306	CO4	Students will be able to analyze different pulse modulation techniques (Analyze)	2.00	2.00	2.00	3.00	3.00	40.00	40.00	20.00	2.60	0.00	0.55	0.48
		Communication		CO5	Students will be able to understand digital modulation and multiplexing system (Understand)		2.50	2.50	3.00	3.00	40.00	40.00	20.00	2.80	0.00	0.52	
				CO6	Students will be able to describe various bandpass modulation schemes (Describe)		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	0.00	0.50	
					Identify classes, objects, members of a class and relationships among												
				CO1	them needed for a specific problem	3.00		3.00	3.00	3.00	40.00	40.00	20.00	3.00	2.00	2.20	
				CO2	Students will be able to write Java application programs using OOP principles	3.00	3.00	3.00			40.00	40.00	20.00	1.20	2.00	1.84	
		Object Oriented			Students will be able to solve computational problems using basic constructs like if-else	5.00	5.00	5.00			10.00	10.00	20.00	1.20	2.00	1.0 1	
6		Programming	SEITC303	CO3	control structures, array, strings.	3.00	3.00	3.00	3.00		40.00	40.00	20.00	2.40	2.00	2.08	2.06
		Methodology		CO4	Students will be able to apply concepts of Inheritance and for code resulability		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	2.00	2.20	
				CO5	The students will be able to demonstrate programs on Abstract classes, exceptions,		3.00	3.00	3.00	5.00	40.00	40.00	20.00	2.40	2.00	2.08	
				CO6	Students will be able to develop various GUI applications usings Swings and AWT				3.00	3.00	40.00	40.00	20.00	1.80	2.00	1.96	
				CO1	Students will able to calculate Eigen value and Eigen vector, and function of a square matrix,	3.00		3.00		3.00	80.00		20.00	3.00	3.00	3.00	
7		Applied	170401	CO2	Student will be evaluate Complex integrals using Cauchy's Theorem and Cauchy's integral forr		3.00	3.00		3.00	80.00		20.00	3.00	3.00	3.00	2.05
/		Mathematics-IV	11C401	CO3	Student will able to determine appropriate sample test and sample size for estimating unknow		3.00	3.00		3.00	80.00		20.00	3.00	3.00	3.00	2.85
				CO4	Student will able to develop critical thinking and problem solving using Big-M Dualityu, and D	3.00		3.00		3.00				0.00	3.00	2.40	
				CO1	Understand principles of LAN design such as topology and configuration depending on types	2.00		2.00	2 00	2.00	40.00	40.00	20.00	2.60	1.00	1 2 2	
				COT	of users accessing the network.	2.00		2.00	5.00	5.00	40.00	40.00	20.00	2.00	1.00	1.52	
				602	Describe various design performance issues like different type of network interfaces network	1.00		1.00		2.00	40.00	40.00	20.00	1.00	1.00	1.00	
		Computor		02	components and choosing appropriate network type and media.	1.00		1.00		3.00	40.00	40.00	20.00	1.00	1.00	1.00	
8		Networks	ITC 402		Ability to understand network industry standards such as: the OSI & TCP models, Routing												1.24
		Networks		СОЗ	Protocols, Address Resolution and Reverse Address Resolution Protocols, IP Addressing and	2.20		2.20	3.00	3.00	40.00	40.00	20.00	2.68	1.00	1.34	
					Subnetting, MAC Addressing												
				CO4	Ability to work with network tools and analyze the performance		2.50	2.50	3.00	2.67	40.00	40.00	20.00	2.73	1.00	1.35	
				CO5	Ability to understand the working of network operating system.		2.00	2.00	3.00		40.00	40.00	20.00	2.00	1.00	1.20	
	ſ			CO1	Ability to understand basic organization of computer	3.00		3.00		3.00	40.00		20.00	1.80	2.00	1.96	
						2.20	1	2 2 0	2.60	2.00	40.00	40.00					
				CO2	Ability to apply computer arithmetic operations on integer and real numbers.	2.38		2.30	2.00	3.00	40.00	40.00	20.00	2.59	2.00	2.12	
		Computer		CO2	Ability to apply computer arithmetic operations on integer and real numbers. Ability to understand processor organization and compare performance of control unit	2.38	3.00	3.00	2.00	3.00	40.00	40.00	20.00	2.59	2.00	2.12	
10	4	Computer Organization	ITC404	CO2 CO3	Ability to apply computer arithmetic operations on integer and real numbers. Ability to understand processor organization and compare performance of control unit operations .	2.38	3.00	3.00	2.00	3.00	40.00	40.00	20.00	2.59 1.80	2.00	2.12 1.96	2.02
10	4	Computer Organization and Architecture	ITC404	CO2 CO3 CO4	Ability to apply computer arithmetic operations on integer and real numbers. Ability to understand processor organization and compare performance of control unit operations . Ability to understand memory organization of computer .	2.38	3.00 3.00	3.00	2.50	3.00	40.00 40.00 40.00	40.00	20.00 20.00 20.00	2.59 1.80 2.80	2.00 2.00 2.00	2.12 1.96 2.16	2.02

				CO6	Ability to analyze the performance of parallel computing systems		3.00	3.00		3.00	40.00		20.00	1.80	2.00	1.96	
				CO1	To learn fundamentals of Regular and Context Free Grammars and Languages	3.00	3.00	3.00		3.00	80.00		20.00	3.00	1.00	1.40	
				CO2	To understand the relation between Regular Language and Finite Automata and machines.	1.86	1.75	1.80		3.00	80.00		20.00	2.04	1.00	1.21	
11		Automata	CELTC 404	CO3	To design Automata's and machines as Acceptors, Verifiers and Translators.	3.00		3.00		3.00	80.00		20.00	3.00	1.00	1.40	1 2 2
11		Theory	SEITC404	CO4	To understand the relation between Contexts free Languages, PDA and TM.		2.50	2.50		3.00	80.00		20.00	2.60	1.00	1.32	1.33
				CO5	To design PDA as acceptor and TM as Calculators.		2.00	2.00		3.00	80.00		20.00	2.20	1.00	1.24	
				CO6	To learn how to co-relate Automata's with Programs and Functions.		3.00	3.00		3.00	80.00		20.00	3.00	1.00	1.40	
				CO1	Student will be able to learn basics of web application development.	2.33		2.33	3.00	3.00	40.00	40.00	20.00	2.73	3.00	2.95	2.95
		WEB		CO2	Student will be able to learn various client side and server side web application technologies.	2.50	2.40	2.45	3.00	3.00	40.00	40.00	20.00	2.78	3.00	2.96	
13		PROGRAMMING		CO3	Student will be able to create the web application using technologies learned.	2.67	2.50	2.58	3.00	3.00	40.00	40.00	20.00	2.83	3.00	2.97	
				CO4	Student will be able to create database connectivity with various server side technologies.		2.00	2.00	3.00	3.00	40.00	40.00	20.00	2.60	3.00	2.92	
				CO1	Ability of students to understand true meaning of Information and Entropy	2.71		2.71	3.00		60.00	40.00		2.83	0.00	0.57	
				CO2	Ability of students to understand and apply compression technique in communication	3.00	3.00	3.00	3.00		60.00	40.00		3.00	0.00	0.60	
14		ІТС		CO3	Ability of students to understand and apply error correction techniques in communication	2.00	3.00	2.50	3.00		60.00	40.00		2.70	0.00	0.54	0.57
				CO4	Ability of students to understand how unique code is generated using Number Theory concents	2.00	3.00	3.00	3.00		60.00	40.00		3.00	0.00	0.60	
				C05	Ability of student to understand how to implement secure communication		2 33	2 3 3	3.00		60.00	40.00		2.60	0.00	0.52	
				C01	Understood basic concents of computer graphics	3.00	2.55	3.00	5.00	3.00	40.00	40.00	20.00	1.80	2.00	1.96	
		Computer		(0)	choose appropriate algorithm for line drawing, line cipping, polygon cipping and polygon	2.00	2.00	2.00	2 00	2.00	40.00	40.00	20.00	2.00	2.00	2.20	
15		Graphics and	TEITC501	CO2	cu: Solve 2D and 2D Transformation problems	3.00	2.00	2.00	2.00	2.00	40.00	40.00	20.00	2.00	2.00	2.20	2.14
		Virtual Reality		CO3	To design and implement an application with the principles of virtual reality		3.00	3.00	3.00	3.00	40.00	40.00	20.00	2.00	2.00	2.20	
				CO4	Coulorstand implement an application with the principles of virtual reality	2.00	3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	2.00	2.20	
		ODEDATING		01	Students will be able to describe the main objectives and functions of operating system.	3.00	2.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
		OPERATING	TEITC502	02	Studenis win de able to texamine now the operating system is responsible for managing the	2.00	3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	3.00
		SYSTEIVI		CO3		3.00	2.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				C04	Students will be able to analyze the performance of various memory management policies.		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				CO1	Students will be able to learn the concepts and architecture of embedded systems	2.00		2.00		3.00	40.00		20.00	1.40	1.00	1.08	
		MICROCONTROL		CO2	Students will be able to understand the basics of microcontroller 8051.	2.00		2.00	3.00	3.00	40.00	40.00	20.00	2.60	1.00	1.32	
13		LER AND	ITC 505	CO3	Students will be able to apply the concepts of microcontroller programming		3.00	3.00		3.00	40.00		20.00	1.80	1.00	1.16	1.18
		EMBEDDED		CO4	Students will be able to learn the concepts of ARM7 architecture.		2.67	2.67		3.00	40.00		20.00	1.67	1.00	1.13	
		SYSTEMS		CO5	Students will be able to analyse various real-time operating system		3.00	3.00		3.00	40.00		20.00	1.80	1.00	1.16	
				CO6	Students will be able to learn different design platforms used for an embedded systems		1.00	1.00	3.00	3.00	40.00	40.00	20.00	2.20	1.00	1.24	
				CO1	the completion of the course, statements which are to consider complex queries using sign	1.50	0.00	0.75	3.00		40.00	40.00	20.00	1.50	1.00	1.10	
	F			CO2		2.00		2.00	3.00		40.00	40.00	20.00	2.00	1.00	1.20	
15	5	ADBMS	ITC504	CO3	encompany and istanta new databases are detainly stored and decessed, new addisation receiver	0.67	1.00	0.83	3.00		40.00	40.00	20.00	1.53	1.00	1.11	1 17
10		, 10 0 11 10		CO4	in the completion of the course, statements will be able to Apply security controls to avoid any		1.00	1.00	3.00	3.00	40.00	40.00	20.00	2.20	1.00	1.24	
				CO5	Ohi ant bana di senteme ca Distribucian deta la ca since la tiparanta una mananta (Cresta)		0.50	0.50	3.00	3.00	40.00	40.00	20.00	2.00	1.00	1.20	
				CO6	onderstand the importance of enterprise data and be able to organize data to perform analysis		0.33	0.33	3.00	3.00	40.00	40.00	20.00	1.93	1.00	1.19	
				CO1	Design a technical document using precise language, suitable vocabulary and apt style.					3.00		20.00	80.00	2.40	0.00	2.40	
		DUICINIECO		CO2	Develop the fire skins/ interpersonal skins to progress professionally by building stronger					3.00		20.00	80.00	2.40	0.00	2.40	
4.6		BUSINESS	TEITOFOC	CO3	Demonstrate awareness of contemporary issues knowledge of professional and ethical					3.00		20.00	80.00	2.40	0.00	2.40	2.52
16			TELLC506		Apply the traits of a suitable candidate for a job/higher education, upon being trained in the												2.52
		UN AND ETHICS		CO4	techniques of holding a group discussion, facing interviews and writing resume/SOP.					3.00		20.00	80.00	2.40	0.00	2.40	
				CO5	Deliver formal presentations effectively implementing the verbal and non-verbal skills.				3.00	3.00		20.00	80.00	3.00	0.00	3.00	
				CO1	Understand the fundamental concents of open-source operating system Linux	0.75		0.75		2 50	40.00	40.00	20.00	0.80	0.00	0.16	0.29
				CO2	Learn and execute the basic set of commands and editors in Linux operating system	0.75		0.25	2 50	2.50	40.00	40.00	20.00	1 10	0.00	0.22	0.25
				CO2	Implement user and system administration in Linux	0.25		0.25	3.00	2.50	40.00	40.00	20.00	2.00	0.00	0.22	
17		OST	TEITC505	CO1	Lice the features of the Linux Server Applications	0.75	0.50	0.75	2.00	2.50	40.00	40.00	20.00	1.00	0.00	0.40	
				C04	write, test and debug the shell scripts to perform various tasks using conditional constructs,		0.30	0.30	2.00	2.30	40.00	40.00	20.00	1.02	0.00	0.30	
				005	while and fee loose.		0.25	0.25	2.00	3.00	40.00	40.00	20.00	1.50	0.00	0.30	
				100	Describe Antifold platform, architecture and features.		0.50	0.50	2.00	3.00	40.00	40.00	20.00	1.60	0.00	0.32	
				CO1	Define various software application domains and remember different process model used in software development	2.10		2.10			40.00	40.00	20.00	0.84	0.00	0.17	0.46
				602	Explain needs for software specifications also they can classify different types of software	2.00		2.00	2.00		40.00	40.00	20.00	2.40	0.00	0.40	
					requirements and their gathering techniques.	3.00		3.00	3.00		40.00	40.00	20.00	2.40	0.00	0.48	
				СОЗ	Convert the requirements model into the design model and demonstrate use of software and		1.00	1.00	3.00	3.00	40.00	40.00	20.00	2.20	0.00	0.44	
		I Software			asci interface design principies.												

22		Engineering	ITC601	CO4	Distinguish among SCM and SQA and can classify different testing strategies and tactics and compare them		3.00	3.00	3.00		40.00	40.00	20.00	2.40	0.00	0.48	
				CO5	Justify role of SDLC in Software Project Development and they can evaluate importance of Software Engineering in PLC		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	0.00	0.60	
				CO6	Generate project schedule and can construct, design and develop network diagram for different type of Projects. They can also organize different activities of project as per Risk impact factor.		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	0.00	0.60	
				CO1	Student will gains clear understanding of fundamental principles of Distributed Systems	2.14		2.14	3.00	3.00	40.00	40.00	20.00	2.66	0.00	0.53	
				CO2	student will understands the message communication, remote * procedure can and kemote	1.60		1.60	3.00	3.00	40.00	40.00	20.00	2.44	0.00	0.49	
23		Distributed	TEITC602	CO3	Student will understands importance of consistency and replication in Distributed Operation		1.00	1.00	3.00	3.00	40.00	40.00	20.00	2.20	0.00	0.44	0.43
		Systems		CO4	Stadents the emphasized on developing applications using earlient distributed comparing		2.25	2.25		3.00	40.00	40.00	20.00	1.50	0.00	0.30	
				CO5	Student will able to explain design and implementation of key mechanisms, clock		1.00	1.00	3.00	0.50	40.00	40.00	20.00	1.70	0.00	0.34	
				CO6	Construction Florida Alexandre March Frederica Marca - Communication Decome and	2.00	2.33	2.33	3.00	1.50	40.00	40.00	20.00	2.43	0.00	0.49	
	~			C01	Understand the key concepts and goals of security	2.00		2.00	3.00	2.00	40.00	40.00	20.00	2.40	3.00	2.88	
	6			CO2	Explain the basic idea behind access control and compare the various access control policies and models.	2.40		2.40	3.00	1.00	40.00	40.00	20.00	2.36	3.00	2.87	
24		System and Web	TEITC603	CO3	Explain the need for security protocols and use them on Internet-based applications;	2.00		2.00	3.00	3.00	40.00	40.00	20.00	2.60	3.00	2.92	2.91
		Security		CO4	Build firewalls and intrusion detection systems and demonstrate their working.		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				CO5	Explain malicious software and typical software solutions used in dealing with virusesand worms;		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				CO6	Understand and explain various issues related to program security and web security		3.00	3.00		3.00	40.00	40.00	20.00	1.80	3.00	2.76	
				CO1	Demonstrate an understanding of the importance of data mining and the principles of business intelligence	3.00		3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
25		DATA MINING	ITC604	CO2	Organize and Prepare the data needed for data mining using pre pre-processing techniques and perform exploratory analysis on it	2.29		2.29	3.00	3.00	40.00	40.00	20.00	2.71	3.00	2.94	2.94
23		INTELLIENCE	110004	CO3	Design and Implement the appropriate classification data mining techniques and apply merics of measures on it	3.00	2.75	2.88	3.00	3.00	40.00	40.00	20.00	2.95	3.00	2.99	2.94
				CO4	Apply the appropriate clustering data mining techniques and perform outlier analysis	2.00	2.00	2.00	3.00	3.00	40.00	40.00	20.00	2.60	3.00	2.92	
				CO5	Implement the appropriate Assoiation mining data mining techniques		1.33	1.33	3.00	3.00	40.00	40.00	20.00	2.33	3.00	2.87	
				CO1	Student is able to develop Keyword Generation, Using Google Analytics etc.	3.00		3.00	3.00	3.00	40.00	40.00	20.00	3.00	0.00	0.60	
				CO2	Student is able to apply Responsive Web Design.		3.00	3.00	1.00	3.00	40.00	40.00	20.00	2.20	0.00	0.44	
		INTERNET	TEITTEOS	CO3	Student is able to elobrate Amazon/Google or yahoo mashup.		3.00	3.00	2.00	3.00	40.00	40.00	20.00	2.60	0.00	0.52	0.54
		TECHNOLOGY	TEITTOOS	CO4	Student is able to understand concepts in SEO.	3.00		3.00	2.00	3.00	40.00	40.00	20.00	2.60	0.00	0.52	0.54
				CO5	Student is able to design RIA using various technologies using JavaScript, REST/WS, etc.		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	0.00	0.60	
				CO6	Student is able to demonstrate advanced topics of HTML5, CSS3.		2.80	2.80	2.75	3.00	40.00	40.00	20.00	2.82	0.00	0.56	
				CO1	student will be able to recall the reasons for Software Project failures. Remember	3.00	3.00	3.00	3.00	1.00	40.00	40.00	20.00	2.60	2.00	2.12	
		SOFTWARE		CO2	Students will be able to initiate new software project. Apply	3.00	3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	2.00	2.20	
28		PROJECT	BEITC701	CO3	Students will be able to develop work break down structure. Analyze	3.00	3.00	3.00	3.00		40.00	40.00	20.00	2.40	2.00	2.08	2.11
		MANAGEMENT		CO4	Students will be able to produce software project management Plan. Create		3.00	3.00	3.00		40.00	40.00	20.00	2.40	2.00	2.08	
				CO5	Students will be able to Prepare project Estimate		3.00	3.00	3.00		40.00	40.00	20.00	2.40	2.00	2.08	
				CO6	Students will be able to identify need of project		3.00	3.00	3.00		40.00	40.00	20.00	2.40	2.00	2.08	
				CO1	Students should be able to define Cloud Computing and memorize the different Cloud service and deployment models	2.00	3.00	2.50	3.00	3.00	40.00	40.00	20.00	2.80	2.00	2.16	2.03
				CO2	Students should be able to describe importance of virtualization along with their technologies.	2.25	3.00	2.63	3.00	2.00	40.00	40.00	20.00	2.65	2.00	2.13	
29		Cloud	ITC702	СОЗ	Students should be able to use different cloud computing and mobile computing services	3.00	3.00	3.00		2.00	40.00	40.00	20.00	1.60	2.00	1.92	
23		Computing	110702	CO4	Students should be able to analyze the components of open stack & Google Cloud platform	3.00	3.00	3.00	3.00		40.00	40.00	20.00	2.40	2.00	2.08	
				CO5	Students should be able to describe components of Amazon web Services and the Architechture	1.00	2.00	1.50	3.00		40.00	40.00	20.00	1.80	2.00	1.96	

				CO6	Students should be able to Design & develop backup strategies for cloud with security	3.00	2.00	2.50		3.00	40.00	40.00	20.00	1.60	2.00	1.92	
				CO1	students will develop a basic understanding of the building blocks of Al as presented in terms	2.25		2 25	3.00	3 00	40.00	40.00	20.00	2 70	2.00	2 14	
				CO2	studentis wit de able to examine and choose an appropriate problem-solving method and	1.83	3.00	2.42	2.00	3.00	40.00	40.00	20.00	2.37	2.00	2.07	
		Intelligence		CO3	Student will able to understand and design solution for games	0.50	5.00	0.50	3.00	3.00	40.00	40.00	20.00	2.00	2.00	2.00	
30		System	ITC703	CO4	Students will develop an ability to plan and formalize the problem		1.33	1.33	3.00	3.00	40.00	40.00	20.00	2.33	2.00	2.07	2.09
		,		CO5	Student will able to understand importance of uncertainty in Al		3.00	3.00	2.00	3.00	40.00	40.00	20.00	2.60	2.00	2.12	
				CO6	Students will be able to develop/demonstrate/ build simple intelligent systems or classical toy		2.50	2.50	3.00	3.00	40.00	40.00	20.00	2.80	2.00	2.16	
				CO1	Describe the new trends and characteristics of mobile/wireless communications networks	2.67		2.67	3.00	3.00	40.00	40.00	20.00	2.87	3.00	2.97	
				CO2	Explain the multiple radio access techniques and multiuser detection techniques	0.50		0.50	3.00		40.00	40.00	20.00	1.40	3.00	2.68	
		WIRELESS		CO3	Understand various wireless networks and their technologies	1.00		1.00	3.00	2.50	40.00	40.00	20.00	2.10	3.00	2.82	
31		TECHNOLOGY	111/01	CO4	Understand the multiuser detection techniques		2.67	2.67	3.00	3.00	40.00	40.00	20.00	2.87	3.00	2.97	2.89
				CO5	Simulate methods for real world problems in implementing wireless solution		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				CO6	Understand need of securities and economies in wireless systems		3.00	3.00	3.00		40.00	40.00	20.00	2.40	3.00	2.88	
				CO1	Students will be able to analyse and interpret the technological, user, network requirements	3		3	2	3	40	40	20	2.60	2	2.12	
				CO2	Students will be able to apply the knowledge gained and modern engineering tools in their	3		3	2	3	40	40	20	2.60	2	2.12	
	7	5 000 00 050 05		CO3	Students will be able to Identify the e-business model		3	3	3	3	40	40	20	3.00	2	2.20	
32		E-COMMERCE	BEITC7053	604	Students will be able to compare e-payment and e-marketing along with promotional					2	40	40	20		2		2.14
		AND BOSINESS		C04	strategies.		2.8	2.8	3	э	40	40	20	2.92	2	2.18	
				CO5	students will be able to "understand havigation now", miormation now to develop e-commerce		3	3	1.5	3	40	40	20	2.40	2	2.08	
				CO6	Students will able to learn the various E-business strategies		3	3	2.5	3	40	40	20	2.80	2	2.16	
				CO1	To understand the fundamental concepts of a digital image processing system	3.00		3.00	3.00		40.00	40.00		2.40	3.00	2.88	
				CO2	To understand and apply the concepts of image enhancement Techniques	3.00		3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
33		Image	BEITC7051	CO3	To understand and apply various image Transforms	3.00	3.00	3.00	3.00		40.00	40.00		2.40	3.00	2.88	2 79
55		Processing	DEITC/051	CO4	To analyse and compare various compression techniques in Image Processing.		2.75	2.75	3.00		40.00	40.00		2.30	3.00	2.86	2.15
				CO5	To apply various segmentation and object description techniques		2.71	2.71			40.00			1.09	3.00	2.62	
				CO6	To study Color Models and various applications of image processing					3.00			20.00	0.60	3.00	2.52	
				CO1	to understand logical and physical components of a storage inmastructure and identity	3.00		3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				CO2	define bedruge accuracy including storage subsystems, sail, has, and ip-sail, also	3.00	3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
36		SNMR	BEITC801	CO3	to examine emerging technologies including IP-SAN	3.00	3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	2.98
				CO4			3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				CO5	to understand the backup and recovery techniques		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				CO6	to understand algorithms of information retrieval in storage network		3.00	3.00	3.00		40.00	40.00	20.00	2.40	3.00	2.88	
				CO1	שנייטייטעב נט פוונופוועי לע מצפ איז אולאיטיגא ווגפ המעסטף, איט געב נט פוונופוועי גנטיפ דפנוופעיפ מוער	3.00		3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
		DIC DATA		<u>CO2</u>		2.00		2.00	3.00	3.00	40.00	40.00	20.00	2.60	3.00	2.92	
37		BIG DATA	ITC801	03	Implement several Data Intensive tasks using the Map Reduce Paradigm	1.00	2.60	1.00	3.00	3.00	40.00	40.00	20.00	2.20	3.00	2.84	2.88
		ANALTTICS		04	Apply several newer algorithms for Clustering, Classifying and finding associations in Big Data	2.25	2.60	2.43	2.00	3.00	40.00	40.00	20.00	1.57	3.00	2.71	
				COS	Apply algorithms to analyze Big data like streams, web Graphs and Social Media data.		2.33	2.33	3.00	3.00	40.00	40.00	20.00	2.73	3.00	2.95	
				601	students will be able to understand the meaning of simulation and its importance in business,	2.00	5.00	3.00	3.00	2.00	40.00	40.00	20.00	2.40	3.00	2.00	
				1001	ciones anginaring inductor and conject	3.00	2.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	2.00	2.20	
		Computer		CO2	Students will be able to identify the common applications of discrete-event system simulation. Students will be able to analyze events and inter-arrival time, arrival process, queuing	3.00	3.00	3.00	2.00	3.00	40.00	40.00	20.00	2.60	2.00	2.12	
38		Simulation and	BEITC803	CO3	stratagies resources and disposal of antities		3.00	3.00	2.14	3.00	40.00	40.00	20.00	2.66	2.00	2.13	2.08
		Modeling		CO4	Students will be able to define random variate generators for finite random variables .	3.00	3.00	3.00		3.00	40.00		20.00	1.80	2.00	1.96	
				CO5	Students will be able to analyze and fit the collected data to different distributions.		3.00	3.00	2.00	3.00	40.00	40.00	20.00	2.60	2.00	2.12	
				CO6		3.00		3.00		3.00	40.00		20.00	1.80	2.00		
				CO1	Learn about soft computing techniques and their applications.	3.00		3.00	3.00	3.00	40.00	40.00	20.00	3.00	3.00	3.00	
				CO2	Analyze various neural network architectures.	2.30		2.30	3.00	3.00	40.00	40.00	20.00	2.72	3.00	2.94	
39		Soft Computing	BEITC8045	CO3	Define the fuzzy systems and analyze the working of controllers.		2.88	2.88	3.00	3.00	40.00	40.00	20.00	2.95	3.00	2.99	2.92
				CO4	Demonstrate the efficiency of neuro-fuzzy hybrid system.		3.00	3.00		3.00	40.00	40.00	20.00	1.80	3.00	2.76	
				CO5	Examine the genetic algorithms and their applications.		3.00	3.00	3.00	1.00	40.00	40.00	20.00	2.60	3.00	2.92	
				CO1	identity the reasons for bugs and analyse the principles in software testing to prevent and	2.50		2.50	3.00	3.00	40.00	40.00	20.00	2.80	2.00	2.16	
				CO2	Implement various test processes for quality improvement	3.00	2.67	2.83	3.00	2.50	40.00	40.00	20.00	2.83	2.00	2.17	

40	•	STOA	BEITC8046	CO3	Apply the software testing techniques in commercial environments	3.00	3.00	3.00	3.00	2.00	40.00	40.00	20.00	2.80	2.00	2.16	2 1 8
40	0	3104	DEITCOUTU	CO4	Provides practical knowledge of a variety of ways to test software and an understanding of		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	2.00	2.20	2.10
				CO5	Familiar with the open source testing tools.		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	2.00	2.20	
				CO6	The students will be able to discuss different software quality models to understand different		3.00	3.00	3.00	3.00	40.00	40.00	20.00	3.00	2.00	2.20	

									Mapping																A	ttainment	t .						
Sr.No.	Sem	Subject	Subject	PO1 PO2	PO3	PO4	PO5	P06 P07	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3		Co	P01	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2 F	PSO3
			Code															attainment		. 02								1.0.0		1.0.2			000
1		Applied Mathematics-I	FEC101	2 1										1.6				0.6	0.40	0.20											0.32		
2	-	Applied Physics-I	FEC102	3 2	2 2	2		2	2					3	1	1 1		0.38	0.38	0.25	0.25				0.25						0.38	0.13	0.13
3		Applied Chemistry -I	FEC103	3 1.6	5					2				3		1		0.34	0.34	0.18							0.23			L	0.34		0.11
4		Engineering Mechanics	FEC104	3 2.8	3					1	2		1.5	3		1		0.5	0.50	0.47							0.17	0.33		0.25	0.50		0.17
5		Basic Electrical Engineering	FEC105	3 3	1.6	6 3	3 1	1.4 2	2	1			1.6	3	2.6	6 1		0.42	0.42	0.42	0.22	0.42	0.14	0.20	0.28		0.14			0.22	0.42	0.36	0.14
7		Environmental studies	FEC106	3 1	1	1	1	1 1	L				1	2.83	1	1 1		0.11	0.11	0.04	0.04		0.04	0.04	0.04					0.04	0.10	0.04	0.04
8	1	Basic Workshop Practice-I	FEL101	3 2	2 3	3				2			1	3	1	1 1	. 11	3	3.00	2.00	3.00						2.00			1.00	3.00	1.00	1.00
9		Applied Mathematics-II	FEC201	2 1	1	1.5	5 3							1.4	1.5	5		0.43	0.29	0.14		0.22	0.43								0.20	0.22	
10		Applied Physics-II	FEC202	3 2	2 2	2		1.5	5					3	1	1 1		0.47	0.47	0.31	0.31				0.24						0.47	0.16	0.16
11		Applied Chemistry -II	FEC203	2.6 1.75	6	2	2	3	3	2.5				2.4	1	1 1		0.51	0.44	0.30		0.34			0.51		0.43				0.41	0.17	0.17
12		Engineering Drawing	FEC204	3 2.5	2.33	3				1	1.5		1	3	1	1 1		0.6	0.60	0.50	0.47						0.20	0.30	1	0.20	0.60	0.20	0.20
13		Structured Programming ApproacH	FEC205	3 1.8	1.33	3								2.83	1	1		0.77	0.77	0.46	0.34										0.73	0.26	
14		Communication Skills	FEC206	2.75 1	L					2	3		1	2.25		1		2.96	2.71	0.99							1.97	2.96	,	0.99	2.22		0.99
15	2	Basic Workshop Practice II	FEL201	3 2	2 3	3				2			1	3	1	1 1	. 11	3	3.00	2.00	3.00						2.00			1.00	3.00	1.00	1.00
16		Applied Mathematics III	ITC301	2.25 1			3							1.75	1	1		0.6	0.45	0.20			0.60								0.35	0.20	
17		ANALOG AND DIGITAL CIRCUITS	ITC302	3 2	2 2	2	3							1.5	1	1		1.19	1.19	0.79	0.79		1.19							1	0.60	0.40	
18		Data Structures & Analysis	ITC303	2 3	2	2 2	2							1.25	1	1		0.8	0.53	0.80	0.53	0.53									0.33	0.27	
19		Database Management System	ITC304	2.67 3	3	3	2							2.5	1.25	5		0.53	0.47	0.53	0.53		0.35								0.44	0.22	
20		Principles of Analog and Digital Commu	Ir SEITC306	2.33 2	2 2	2								2.67	1	1		0.48	0.37	0.32	0.32										0.43	0.16	
		Object Oriented Programming	CELTC202																											1 1			
21	3	Methodology	SEITCSUS	2.67 1.8	1.8	3								2.5	1	1		2.3	2.05	1.38	1.38										1.92	0.77	
22		Applied Mathematics-IV	ITC401	2 1	1	2	2 3							1.5	1	2		2.85	1.90	0.95		1.90	2.85								1.43	1.90	-
23		Computer Networks	ITC 402	2 1		2	2 3							1.5	2	2		2.85	1.90	0.95		1.90	2.85								1.43	1.90	
	1	Computer Organization and	170404																														
24		Architecture	11C404	2 2	2 3	3	2.5							1.25	1	1		1.24	0.83	0.83	1.24		1.03								0.52	0.41	
25	1	Automata Theory	SEITC404	2.33 1.25	2.5	5							1	2.17	1	1 1		1.34	1.04	0.56	1.12									0.45	0.97	0.45	0.45
26	1	WEB PROGRAMMING		1.75 2.25	2.5	5								2.75	1	1		2.95	1.72	2.21	2.46									1	2.70	0.98	
27	4	ITC		2 1										1.8				0.57	0.38	0.19										1	0.34		
28		Computer Graphics and Virtual Reality	TEITC501	2.25 2	: 3	3								2.25	1	1		2.14	1.61	1.43	2.14									1	1.61	0.71	
29	1	OPERATING SYSTEM	TEITC502	3 2	2	1	2							2.75	1	1		3	3.00	2.00		2.00								1	2.75	1.00	
30		MICROCONTROLLER AND EMBEDDED S	S ITC 505	1.67 2	2									1.33				1.3	0.72	0.87											0.58		
31	1	ADBMS	ITC504	2.2 2	2	1.5	5 1							1.5	1	1		1.18	0.87	0.79		0.59	0.39								0.59	0.39	-
32		BUSINESS COMMUNICATION AND ETHI	ICTEITC506	2.8 1			2		2	1.5	3		1	2	1	1 1		2.52	2.35	0.84			1.68			1.68	1.26	2.52	1	0.84	1.68	0.84	0.84
33	5	OST	TEITC505	2.75 3	1 2	2 2	2 2	2						2.2	1	1 1		0.29	0.27	0.29	0.19	0.19	0.19	0.19							0.21	0.10	0.10
34		Software Engineering	ITC601		3	3 2	2	1				3		3		1.33	1	1			1.00	0.67		0.33					1.00	/ · · ·	1.00		0.44
35		Distributed Systems	TEITC602	2.25 1			3							1.5	1	1		0.43	0.32	0.14			0.43								0.22	0.14	
36	1	System and Web Security	TEITC603	2.17			2							1.33	1	1		2.91	2.10				1.94							1	1.29	0.97	
37	1	DATA MINING AND BUSINESS INTELLIEI	NITC604	2.6 2.75	1	1	3							2.6	2	2		2.94	2.55	2.70	0.98		2.94							1	2.55	1.96	
38	6	ADVANCED INTERNET TECHNOLOGY	TEITT605	3 2	2.6	6	3							2.33	1.2	2		0.54	0.54	0.36	0.47		0.54								0.42	0.22	
39		SOFTWARE PROJECT MANAGEMENT	BEITC701	3 3	2.75	5 3	3 2	2	2 2	2	3	2.33	2.5	2.33	1.2	2 1		2.59	2.59	2.59	2.37	2.59	1.73		1.73	1.73	1.73	2.59	2.01	. 2.16	2.01	1.04	0.86
40		Cloud Computing	ITC702	2 1.33	1.6	5 1	1							2.33	1.2	2		2.15	1.43	0.95	1.15	0.72									1.67	0.86	
41	1	Intelligence System	ITC703	2.75 3	1 2	2 2	2 2	2						2.2	1	1 1		2.3	2.11	2.30	1.53	1.53	1.53	1.53							1.69	0.77	0.77
42		WIRELESS TECHNOLOGY	ITL701	2.5	2	2 1	1							1.5	1	1		2.89	2.41		1.93	0.96	0.96								1.45	0.96	
43		E-COMMERCE AND -BUSINESS	BEITC7053	3 2.33	2.83	3								2.33	1	1		2.26	2.26	1.76	2.13										1.76	0.75	
44	7	Image Processing	BEITC7051	3 2	2 2	2 2.5	5							1.33	1	1		2.79	2.79	1.86	1.86	2.33									1.24	0.93	
45		SNMR	BEITC801	2 2	2.5	5								1	1	1		2.98	1.99	1.99	2.48										0.99	0.99	-
46	1	BIG DATA ANALYTICS	ITC801	1.33 2	2.25	5								1.67	1	1		2.88	1.28	1.92	2.16										1.60	0.96	
47	1	Computer Simulation and Modeling	BEITC803	2.5 2	2.33	3								2.5	1	1		2.08	1.73	1.39	1.62										1.73	0.69	
48	1	Soft Computing	BEITC8045	2.5 1.67	,		1							2	1	1		2.92	2.43	1.63			0.97								1.95	0.97	
49	8	STQA	BEITC8046	2.5	2.5	5 2	2 2							1.5	1	1		2.18	1.82		1.82	1.45	1.45								1.09	0.73	
				PO1 PO2	PO3	PO4	PO5	PO6 PO7	PO8	PO9	PO10	PO11 F	PO12	PSO1	PSO2	PSO3			1.35	1.00	1.28	1.15	1.15	0.46	0.51	1.71	1.01	1.74	1.51	. 0.72	1.13	0.66	0.45
				2.513191 1.905227	2.239355	5 1.96875	2.166667	1.48 1.916667	2	1.7	2.5	2.665	1.26	2.165208	1.145122	2 1.019412			2.74	2.81	2.78	2.80	2.79	2.65	2.79	2.79	2.83	2.80	2.81	. 2.67	2.78	2.79	2.80
			75	1.88 1.43	1.68	3 1.48	1.63	1.11 1.44	1.5	1.28	1.88	2	0.95	1.62	0.86	6 0.76			1.63	1.36	1.58	1.48	1.48	0.90	0.96	1.92	1.38	1.95	, 1.77	1.11	1.46	1.09	0.92
			2017-2018	1.6 1.37	1.54	4 1.29	1.5	1.05 0.94	1.8	1.39	1.93	1.61	1.16	1.45	1.04	4 0.96																	
			2018-2019	1.63 1.36	1.58	3 1.48	1.48	0.9 0.96	1.92	1.38	1.95	1.77	1.11	1.46	1.09	9 0.92																	
			2019-2020	1.65 1.52	1.68	3 1.33	1.64	1.54 1.53	1.64	1.67	1.9	1.94	1.14	1.53	1.16	6 1.04																	
				PO1 PO2	PO3	PO4	PO5	PO6 PO7	PO8	PO9	PO10	PO11 F	PO12	PSO1	PSO2	PSO3																	
			FE	1.507915 1.143136	1.343613	3 1.18125	i <u>1.3</u>	0.888 1.15	5 1.2	1.02	1.5	1.599	0.756	1.299125	0.687073	3 0.611647																	

FE 100	2.810714	1.817857	2.0325	2.166667	1.666667	1.2	1.9	0	1.6875	2.166667	0	1.157143	2.665	1.21	1
60	1.69	1.09	1.22	1.3	1	0.72	1.14	0	1.01	1.3	0	0.69	1.6	0.73	0.6
2017-2018	1.16	0.69	0.93	0.64	1.4	0.19	0.25		0.74	1.31		0.57	1.03	0.49	0.35
2018-2019	0.96	0.59	0.95	0.33	0.2	0.12	0.26		0.89	1.2		0.53	0.91	0.35	0.37
2019-2020	0.94	0.58	1.06	0.37	0.47	0.61	0.69	0.8	0.93	0.83	0.11	0.46	0.9	0.39	0.38