## Shri Tuljabhavani College Of Engg. Tuljapur

## **Computer Science And Engineering Department**

		Course outcomes				
		Second Year C	SE			
Course no	).	• Course code	Course name			
• C301		• BTBS301	<ul><li>Engineering</li><li>Mathematics – III</li></ul>			
• COs	• After to:	<ul> <li>After the successful completion of this course student will be able</li> </ul>				
• 1		<ul> <li>Find Laplace Transforms of elementary functions by applying suitable property and/or suitable method.</li> </ul>				
• 2		nverse Laplace Transforms o ng suitable property and/or	-			
• 3	suitab	the Fourier Integral of eleme le formula also problems rel orms to domain specific prob	ated to Fourier			
• 4	arbitra respec	<ul> <li>Formulate Partial Differential Equations by eliminating arbitrary constants and functions from system arises in respective domain, also solve them using appropriate technique.</li> </ul>				
• 5	and w techni	<ul> <li>Check the Analyticity of given function and use its other properties as and when required, construct analytic function using suitable technique. Perform contour integration of complex functions by using suitable technique.</li> </ul>				
Course no	).	• Course code	Course name			
• C302		• BTCOC302	<ul><li>Discrete</li><li>Mathematics</li></ul>			
• COs	• After able to	<del>-</del>	of this course student will be			
• 1	• To dev	velop understanding of Logic	Sets and Functions.			
• 2	To use mathematical reasoning techniques including induction and recursion					
• 3	To understand and apply counting techniques to the representation and					
	Chara	cterization of relational conc	repts.			
• 4		_	w graph and tree concepts are used			
	to solv	ve problems arising in the co	mputer science			

• 5	To communicate the solutions of technical problems to other			
	profes	ssionals and to develop improved	d collaborative skills	
• Course no	•	<ul> <li>Course code</li> </ul>	• Course name	
• C303		• BTCOC303	Data Structures	
• COs	• After	the successful completion of th	is course student will be able	
	to:			
• 1	• Stude	nts are able to understand the co	oncept of Dynamic	
	memo	ory management, data types, algo	orithms, Big O	
	notati	on.		
• 2	• Stude	nts are able to understand basic	data structures such as arrays,	
		l lists, stacks and queues.		
• 3		nts are able to describe the hash	function and concepts of	
		on and its resolution methods		
• 4	• Stude	nts are able to solve problem inv	olving graphs, trees and	
	heaps			
• 5		nts are able to apply Algorithm for	<del>= =</del>	
		g, searching, insertion and deleti	1	
• Course no	•	Course code	• Course name	
- 6204		BTCOC304	Computer     Architecture &	
1 • (.304				
• C304		• Bidodoui		
• C304	After t	the successful completion of this c	Organization	
			Organization	
• COs	• To lea	the successful completion of this c	Organization	
• COs • 1	<ul><li>To lea</li><li>To lea</li></ul>	the successful completion of this c	Organization ourse student will be able to:	
• COs • 1 • 2	<ul><li>To lea</li><li>To lea</li><li>Analy</li></ul>	the successful completion of this computer works rn the basic instruction set	Organization ourse student will be able to:	
• COs • 1 • 2 • 3	<ul><li>To lea</li><li>To lea</li><li>Analy:</li><li>Under</li></ul>	the successful completion of this c rn how computer works rn the basic instruction set ze the performance of Computer	Organization ourse student will be able to:	
• COs • 1 • 2 • 3 • 4	<ul><li>To lea</li><li>To lea</li><li>Analy:</li><li>Under</li><li>Under</li></ul>	the successful completion of this c rn how computer works rn the basic instruction set ze the performance of Computer estand the designing of computer	Organization ourse student will be able to:	
• COs • 1 • 2 • 3 • 4 • 5	<ul><li>To lea</li><li>To lea</li><li>Analy:</li><li>Under</li><li>Under</li></ul>	the successful completion of this complete works rn the basic instruction set ze the performance of Computer rstand the designing of computer rstand the design of control unit	Organization ourse student will be able to:  • Course name • Elective –I (b) Object	
• COs • 1 • 2 • 3 • 4 • 5	<ul><li>To lea</li><li>To lea</li><li>Analy:</li><li>Under</li><li>Under</li></ul>	the successful completion of this complete works rn the basic instruction set ze the performance of Computer rstand the designing of computer rstand the design of control unit	Organization ourse student will be able to:  • Course name • Elective –I (b) Object Oriented Programming	
• COs • 1 • 2 • 3 • 4 • 5 • Course no	<ul><li>To lea</li><li>To lea</li><li>Analy:</li><li>Under</li><li>Under</li></ul>	the successful completion of this complete works  rn how computer works  rn the basic instruction set  ze the performance of Computer  rstand the designing of computer  rstand the design of control unit  • Course code	Organization ourse student will be able to:  • Course name • Elective –I (b) Object	
• COs • 1 • 2 • 3 • 4 • 5 • Course no	<ul> <li>To lea</li> <li>To lea</li> <li>Analy:</li> <li>Under</li> <li>Under</li> </ul>	the successful completion of this complete works  rn how computer works  rn the basic instruction set  ze the performance of Computer  rstand the designing of computer  rstand the design of control unit  • Course code	Organization ourse student will be able to:  • Course name • Elective –I (b) Object Oriented Programming in Java	
• COs • 1 • 2 • 3 • 4 • 5 • Course no	<ul> <li>To lea</li> <li>To lea</li> <li>Analy:</li> <li>Under</li> <li>Under</li> </ul>	the successful completion of this complete the performance of Computer stand the designing of computer stand the design of control unit  Course code  BTCOC305	Organization ourse student will be able to:  • Course name • Elective –I (b) Object Oriented Programming in Java	
• COs • 1 • 2 • 3 • 4 • 5 • Course no	<ul> <li>To lea</li> <li>To lea</li> <li>Analys</li> <li>Under</li> <li>Under</li> <li>After</li> <li>to:</li> </ul>	the successful completion of this complete the performance of Computer stand the designing of computer stand the design of control unit  Course code  BTCOC305	Organization ourse student will be able to:  • Course name • Elective –I (b) Object Oriented Programming in Java is course student will be able	
• COs • 1 • 2 • 3 • 4 • 5 • Course no • C305	<ul> <li>To lea</li> <li>To lea</li> <li>Analy:</li> <li>Under</li> <li>Under</li> <li>To Exp</li> </ul>	the successful completion of this complete restand the design of computer restand the design of control unit  Course code  BTCOC305  the successful completion of the	Organization ourse student will be able to:   Course name Elective –I (b) Object Oriented Programming in Java is course student will be able  Programming	
• COs • 1 • 2 • 3 • 4 • 5 • Course no • C305	<ul> <li>To lea</li> <li>To lea</li> <li>Analy:</li> <li>Under</li> <li>Under</li> <li>To Exp</li> <li>To lea</li> </ul>	the successful completion of this complete the performance of Computer stand the designing of computer stand the design of control unit  Course code  BTCOC305  the successful completion of the plain Features of object-oriented	Organization ourse student will be able to:  • Course name • Elective –I (b) Object Oriented Programming in Java is course student will be able  Programming va.	
• COs • 1 • 2 • 3 • 4 • 5 • Course no • C305 • COs	<ul> <li>To lea</li> <li>To lea</li> <li>Analy:</li> <li>Under</li> <li>Under</li> <li>To Exp</li> <li>To lea</li> </ul>	the successful completion of this complete the performance of Computer stand the designing of computer stand the design of control unit  • Course code  • BTCOC305  the successful completion of the plain Features of object-oriented rn control flow statements in Javan how to use array in Java. how	Organization ourse student will be able to:  • Course name • Elective –I (b) Object Oriented Programming in Java is course student will be able  Programming va.	
• COs • 1 • 2 • 3 • 4 • 5 • Course no • C305 • COs	<ul> <li>To lea</li> <li>To lea</li> <li>Analy:</li> <li>Under</li> <li>Under</li> <li>To Exp</li> <li>To lea</li> <li>To lea</li> <li>in java</li> </ul>	the successful completion of this complete the performance of Computer stand the designing of computer stand the design of control unit  • Course code  • BTCOC305  the successful completion of the plain Features of object-oriented rn control flow statements in Javan how to use array in Java. how	Organization ourse student will be able to:  • Course name • Elective –I (b) Object Oriented Programming in Java is course student will be able  Programming va. to pass arrays to method	

	• 5	To learn how to use exception handling in Java applications, able to explain what is JavaScript and able to write client side scripting.			
_	Course no.		Course code	Course name	
•	C306		BTCOL306	Data Structures Lab	
•	СО	• After	the successful completion of the	& Object Oriented Programming Lab is course student will be	
	s	able t	-		
	• 1	To Exp	plain Features of object-oriented	Programming	
	• 2	• To lea	rn control flow statements in Jav	ra.	
	• 3	• To lea	rn how to use array in Java. how	to pass arrays to method	
	• 4	• To lea bindir	rn how to extend Java classes wi ng.	th inheritance and dynamic	
	• 5	To learn how to use exception handling in Java applications, able to explain what is JavaScript and able to write client side scripting.			
•	Course no.		• Course code	• Course name	
•	C307		• BTCOS307	Seminar – I	
•	CO s	to:  • TO De	emonstrate a sound technical known		
	• 2		dertake problem identification,		
	• 3		mulate and solution for a Proble	em	
	• 4	• To De	sign engineering solutions to cor		
	•	• To Pro	ovide Effective presentation and	improve soft skills	
•	Course no.		<ul> <li>Course code</li> </ul>	• Course name	
•	C308		• BTES211P	<ul> <li>Field Training /         Internship /         Industrial Training         Evaluation     </li> </ul>	
•	CO s	• After to:	the successful completion of the	is course student will be able	
	• 1		rate theory and practice.		
	• 2	attitu	various soft skills such as time n de and communication skills dur ned in internship organization.	•	

,						
• 3		mine the challenges and potentia	•			
	internship organization in particular and the sector in general.					
• 4	• Const	guet the company profile by com	niling the brief history			
4	<ul> <li>Construct the company profile by compiling the brief history, management structure, products / services offered, key</li> </ul>					
			-			
		achievements and market performance for his / her				
	organi	ization of internship.				
		Second Year-II				
• Course no.		• Course code	• Course name			
• C401		• BTCOC401	Design & Analysis of			
~~			Algorithms			
• COs		the successful completion of the	is course student will be			
	able to		C.1 21			
• 1		ze the asymptotic performance o	t algorithms			
• 2		ar with major algorithms				
• 3		important algorithmic design pa	radigms and methods of			
	analys					
• 4	-	esize efficient algorithms in engi	neering design			
	situati	ons				
• Course no.		<ul> <li>Course code</li> </ul>	• Course name			
• C402		• BTCOC402	<ul> <li>Operating Systems</li> </ul>			
• COs	• After the successful completion of this course student will be able					
	to:					
• 1	<ul> <li>Identify the role of the operating system as a high-level</li> </ul>					
	interfa	ace to the hardware				
• 2	Understand the Memory Management Strategies for Memory					
		gement				
• 3	Illustrate the low-level implementation of CPU dispatch and					
	sched					
• 4		appropriate knowledge for hand	lling Deadlock, Process			
	Synchronization					
• 5		e the need to handle I/O device	with memory			
	manag	gement strategies				
• Course no.		• Course code	• Course name			
• C403		• BTHM403	Basic Human			
			Rights			
• COs	• After	the successful completion of the	is course student will be able			
	to:					
• 1		stand the history of human right				
• 2		to respect others caste, religion,	region and culture and Be			
	aware	of their rights as Indian citizen				

• 3	Realize the philosophical and cultural basis and historical					
		ectives of human rights.				
• 4	• Make	<ul> <li>Make them aware of their responsibilities towards the nation.</li> </ul>				
Course no	0.	• Course code	Course name			
• C404		• BTBS404	<ul> <li>Probability Theory and Random Processes</li> </ul>			
• COs	• After	the successful completion of th	is course student will be able			
	to:					
• 1	laws o prope	derstand the different approach of addition and multiplication the rties of probability and will try to bles based on Inverse probability	eorem with the help of o solve the			
• 2	able to	tinguish between discrete and co o compute & interpret the expect te data.				
• 3	<ul> <li>To compute &amp; interpret the Karl person correlation coefficient &amp; test for significance. Compute &amp; interpret the spearman's rank correlation coefficient.</li> </ul>					
• 4		ve examples on regression lines, cient of regression with the help	=			
• 5		derstand estimation and sample hesis's	estimation. And try to learn			
• Course n	0.	• Course code	Course name			
• C405		• BTES405	Digital Logic Design &     Microprocessors			
• COs	• After to:	the successful completion of th	is course student will be able			
• 1		e basic logic gates and various re ircuit in detail.	eduction techniques of digital			
• 2	<ul> <li>Design</li> </ul>	n combinational circuits.				
• 3	<ul> <li>Design</li> </ul>	n Sequential circuits.				
• 4		stand the architecture of 8086				
• 5	• Under	stand 8086 instruction set and p	programming's			
• Course n	0.	• Course code	• Course name			
• C406		• BTCOL406	<ul> <li>Operating Systems &amp; Python Programming Lab</li> </ul>			
• COs	• After to:	the successful completion of th	is course student will be able			

	• 1	<ul> <li>Ident</li> </ul>	ify the role of the operating syste	m as a high-level	
			face to the hardware		
	• 2	• Unde	rstand the Memory Management	Strategies for Memory	
		management			
	• 3	<ul> <li>Illustrate the low-level implementation of CPU dispatch and</li> </ul>			
			luling		
	• 4		appropriate knowledge for hand	lling Deadlock, Process	
			nronization		
	• 5		ne the need to handle I/O device	with memory	
			gement strategies	- Ct	
	• 6		o learn installation, fundamentals thon programming.	s, features and future	
	• 7		quaint with data types, input out	nut statements.	
	,		ion making, looping and function		
	• 8		o acquaint with the use and benef	-	
		hand	ling and file handling in Python.		
	• 9	PY: To	o learn features of Object Oriente	d Programming using	
		Pytho			
•	10	• PY: To	o learn Programming with databa	T	
•	Course no.		Course code	• Course name	
•	C407		• BTCOS407	• Seminar - II	
•	CO	• After	the successful completion of the	is course student will be able	
	S	to:			
	• 1	To Es	tablish motivation for any topic o	of interest and develop a	
		thoug	ght process for		
		Tra alaa	nical presentation.		
		recni	To Organize a detailed literature survey and build a		
	• 2			y and build a	
	• 2	• To Or		•	
	• 2	• To Or	ganize a detailed literature surve	blications.	
		<ul><li>To Or docur</li><li>To pe</li></ul>	ganize a detailed literature surve ment with respect to technical pu	blications. on of available data	
	• 3	<ul><li>To Or docur</li><li>To pe</li><li>TO M</li></ul>	ganize a detailed literature surve ment with respect to technical pu rform Analysis and comprehensi	blications. on of available data	
	• 3	<ul><li>To Or docur</li><li>To pe</li><li>TO M techn</li></ul>	ganize a detailed literature surve ment with respect to technical pu rform Analysis and comprehensi ake use of new and recent techno	blications. on of available data llogy (e.g. Latex) for creating	
•	• 3	<ul><li>To Or docur</li><li>To pe</li><li>TO M techn</li></ul>	ganize a detailed literature surve ment with respect to technical pu rform Analysis and comprehension ake use of new and recent technolical reports	blications. on of available data llogy (e.g. Latex) for creating	
•	• 3 • 4	<ul><li>To Or docur</li><li>To pe</li><li>TO M techn</li></ul>	rganize a detailed literature surve ment with respect to technical pu rform Analysis and comprehension ake use of new and recent techno- nical reports tive presentation and improve sof	blications. on of available data blogy (e.g. Latex) for creating ft skill	
•	• 3 • 4 • 5 Course no.	<ul> <li>To Or docur</li> <li>To pe</li> <li>TO M techn</li> <li>Effect</li> </ul>	rganize a detailed literature survement with respect to technical purform Analysis and comprehensionake use of new and recent technolical reports  tive presentation and improve soft  Course code  BTCOF408	on of available data clogy (e.g. Latex) for creating  ft skill  Course name Field Training / Internship / Industrial Training Evaluation	
•	• 3 • 4 • 5 Course no.	<ul> <li>To Or docur</li> <li>To pe</li> <li>TO M techn</li> <li>Effect</li> </ul>	rganize a detailed literature survement with respect to technical purform Analysis and comprehensionake use of new and recent technolical reports  tive presentation and improve soft  Course code	on of available data clogy (e.g. Latex) for creating  ft skill  Course name  Field Training / Internship / Industrial Training Evaluation	
•	• 3 • 4 • 5 Course no.	<ul> <li>To Or docur</li> <li>To pe</li> <li>TO M techn</li> <li>Effect</li> </ul>	rganize a detailed literature survement with respect to technical purform Analysis and comprehensionake use of new and recent technolical reports  tive presentation and improve soft  Course code  BTCOF408	on of available data clogy (e.g. Latex) for creating  ft skill  Course name Field Training / Internship / Industrial Training Evaluation	

	and co	ommunication skills during perfo	ormance of the		
	tasks	tasks assigned in internship organization.			
• 3	Determine the challenges and potential for his / her internship organization in particular and the sector in general.				
• 4	<ul> <li>Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.</li> </ul>				
• 5	•				
		• Third Year-CSE-	I		
• Course no.		<ul> <li>Course code</li> </ul>	• Course name		
• C501		• BTCOC501	Database System		
• COs	• After to:	the successful completion of the	is course student will be able		
• 1	Analyze and design Database Management system using E-R diagram and convert entity relationship diagrams into RDBMS				
• 2	• Imp	plement database queries using i	relational algebra and		
	calculus				
• 3	Implement database queries using structured query language				
• 4		alize the database design using n is forms	ormalization process and its		
• 5	Apply the transaction management and concurrency control concepts in real time				
	examp		<u> </u>		
• Course no.		• Course code	• Course name		
• C502		• BTCOC502	<ul><li>Theory of Computations</li></ul>		
• COs	to:	the successful completion of the			
• 1	<ul> <li>Students will be able to build regular expressions for given regular language.</li> </ul>				
• 2	Students will be able to illustrate different types of automata				
<u> </u>		Students will be able to explain regular and non-regular languages.			
• 3	• Stude				
	• Studen		r and non-regular		
• 3	<ul><li>Studen</li><li>langua</li><li>Studen</li></ul>	ages.	r and non-regular ree grammar.		
• 3	<ul><li>Studen langua</li><li>Studen</li><li>Studen</li></ul>	ages. nts will be able to solve context f	r and non-regular ree grammar. erent types of		

• C503		• BTCOC503	Machine Learning	
• COs	<ul> <li>After the successful completion of this course student will be able to:</li> </ul>			
• 1	Regular language.			
• 2	• Stude:	nts will be able to Classify superv rcement learning problem	rised, Unsupervised &	
• 3	• Stude proble	nts will be able to Design solutionems.	n to regression	
• 4	• Stude result	nts will be able to Solve clusterin s.	g problems & evaluate the	
• Course no.		• Course code	• Course name	
• C504		• BTCOE504	<ul> <li>Elective –III (a)         Introduction to         research     </li> </ul>	
• COs	• After to:	the successful completion of thi	is course student will be able	
• 1	<ul> <li>Under</li> </ul>	stand the different steps involve	d in Research Process	
• 2	• Condu	ict literature survey for specific o	lomain in Research	
• 3	Data A	e the appropriate Modeling Skills Analysis methodology used for ca	rrying out Research.	
• 4	• Condu	ict Technical writing, Report wri ch	ting on specific domain in	
• Course no.		Course code	• Course name	
• C505		• BTHM505	<ul><li>Elective-III</li><li>(b)Business</li><li>communication</li></ul>	
• COs	• After to:	the successful completion of the	s course student will be able	
• 1	• Apply prepa	business communication strategre effective communication for dational business	• •	
• 2	<ul> <li>Identify ethical, legal, cultural, and global issues affecting business communication.</li> </ul>			
• 3	<ul> <li>Participate in team activities that lead to the development of collaborative work skills.</li> </ul>			
• 4	<ul> <li>Select appropriate organizational formats and channels used in developing and presenting business messages.</li> </ul>			
• 5	• Expre	ss an effective oral business pres	entation	
• Course no.		• Course code	• Course name	
• C506		BTCOC506	<ul><li>competitive</li></ul>	

			programming -I		
• COs	• After	the successful completion of	this course student will be able		
	to:	•			
• 1	Analyze (decode) the problem statement given				
• 2	• Write	an algorithm for given proble	m statement		
• 3	• Explai	in the flowchart for algorithm	written for problem		
	_	statement			
• 4	• List a	List and explain the data structures required to solve the problem			
	staten	statement			
• 5	• Imple	Implement program for algorithm for given problem			
	staten	nent			
• 6	• Differ	entiate between the programn	ning languages and select proper		
	one fo	r given problem statement			
• 7	• Use fu	nctionalities to solve problem	statement		
• Course no.		• Course code	Course name		
- C507		BTCOL507	Database System		
• C507		• BICOLSU/	Laboratory		
• COs	• After	the successful completion of	this course student will be able		
	to:				
• 1	Analy	ze and design Database Manag	gement system using E-R diagram		
	and convert				
			DDMC		
		relationship diagrams into RD			
• 2	• Imple	ment database queries using r	relational algebra and calculus		
• 3	• Imple	ment database queries using s	etructurad quary languaga		
<u>-</u>					
• 4		anze the database design using	g normalization process and its		
• 5		the transaction management	and concurrency control		
• 3		pts in real time examples	and concurrency control		
• Course no.	Conce	Course code	Course name		
Course no.		Course code	Machine Learning		
• C508		• BTCOL508	Laboratory		
• COs	• After	the successful completion of	this course student will be able		
Cos		the successful completion of	this course student will be able		
• 1	to:  • Stude	nts will he able to design solut	ion to classification		
	<ul> <li>Students will be able to design solution to classification problems</li> </ul>				
• 2		nts will be able to Classify sup	ervised. Unsunervised &		
		rcement learning problem	or ribba, offbaper vibea a		
• 3		nts will be able to Design solut	tion to regression		
	proble	_			
I	P10010	<del>-</del>			

<ul> <li>Course no.</li> <li>C509</li> <li>BTCOS509</li> <li>Seminar</li> <li>COS</li> <li>After the successful completion of this course student will be able to:         <ul> <li>To train the students in preparing and presenting technical topics</li> </ul> </li> <li>To clarify, deepen the understanding in the subject, and also increase Confidence and presentation skills.</li> <li>To identifying topics of interest related to the program of study and make presentation</li> <li>4</li> <li>To Build Confidence while performing seminar work</li> <li>5</li> <li>Effective presentation and improve soft skills</li> <li>Course no.</li> <li>Course code</li> <li>Course name</li> <li>Field training internship industrial training evaluation</li> <li>C510</li> <li>BTCOF411</li> <li>BTCOF411</li> <li>Integrate theory and practice.</li> <li>1</li> <li>Integrate theory and practice.</li> <li>2</li> <li>Apply various soft skills such as time management, positive attitude and communication skills during performance of the tasks assigned in internship organization.</li> <li>3</li> <li>Determine the challenges and potential for his / her internship organization in particular and the sector in general.</li> <li>4</li> <li>Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.</li> <li>Third Year- CSE- II</li> <li>Course no.</li> <li>Course code</li> <li>Course name</li> <li>Course name</li> <li>C601</li> <li>BTCOG601</li> <li>Compiler Design</li> <li>Acquire knowledge of different phases and passes of the compiler.</li> <li>Students will also be able to design different transe.</li> </ul>	• 4	<ul> <li>Students will be able to Solve clustering problems &amp; evaluate the results.</li> </ul>			
After the successful completion of this course student will be able to:     To train the students in preparing and presenting technical topics     To clarify, deepen the understanding in the subject, and also increase Confidence and presentation skills.     To identifying topics of interest related to the program of study and make presentation     To Build Confidence while performing seminar work     Seffective presentation and improve soft skills     Course no.     Field training internship industrial training evaluation     Soft able to:     Integrate theory and practice.     Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.     Determine the challenges and potential for his / her internship organization in particular and the sector in general.      Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.      Third Year-CSE-II     Course no.     Course code     Compiler Design     After the successful completion of this course student will be able to:     After the successful completion of this course student will be able to:     After the successful completion of this course student will be able to:	• Course no		• Course code	Course name	
to:  1 To train the students in preparing and presenting technical topics  2 To clarify, deepen the understanding in the subject, and also increase Confidence and presentation skills.  3 To identifying topics of interest related to the program of study and make presentation  4 To Build Confidence while performing seminar work  5 Effective presentation and improve soft skills  Course no.  6 Course code  7 Field training internship industrial training evaluation  Field training internship industrial training evaluation  COS  8 After the successful completion of this course student will be able to:  9 1 Integrate theory and practice.  9 2 Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.  9 3 Determine the challenges and potential for his / her internship organization in particular and the sector in general.  9 4 Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.  9 Course no.  1 Course code  1 Course no.  1 Course code  2 Compiler Design  1 COS  2 After the successful completion of this course student will be able to:  1 Acquire knowledge of different phases and passes of the compiler.	• C509		• BTCOS509	• Seminar	
To train the students in preparing and presenting technical topics      To clarify, deepen the understanding in the subject, and also increase Confidence and presentation skills.      To identifying topics of interest related to the program of study and make presentation      To Build Confidence while performing seminar work     S	• COs	• After	the successful completion of the	is course student will be able	
technical topics  To clarify, deepen the understanding in the subject, and also increase Confidence and presentation skills.  To identifying topics of interest related to the program of study and make presentation  4 To Build Confidence while performing seminar work  5 Effective presentation and improve soft skills  Course no.  Course code  Field training internship industrial training evaluation  After the successful completion of this course student will be able to:  I Integrate theory and practice.  Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.  A Determine the challenges and potential for his / her internship organization in particular and the sector in general.  A Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.  Third Year- CSE- II  Course no.  Course code Course no.  After the successful completion of this course student will be able to:  Acquire knowledge of different phases and passes of the compiler.		to:			
Confidence and presentation skills.  To identifying topics of interest related to the program of study and make presentation  To Build Confidence while performing seminar work  Effective presentation and improve soft skills  Course no.  Course code  Course name  Field training internship industrial training evaluation  COS  After the successful completion of this course student will be able to:  Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.  Apply various feelinges and potential for his / her internship organization in particular and the sector in general.  Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.  Third Year-CSE-II  Course no.  Course no.  Acquire knowledge of different phases and passes of the compiler.	• 1	To trai	in the students in preparing and	presenting	
Confidence and presentation skills.  To identifying topics of interest related to the program of study and make presentation  To Build Confidence while performing seminar work  Effective presentation and improve soft skills  Course no.  Course code  Course name  Field training internship industrial training evaluation  COS  After the successful completion of this course student will be able to:  Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.  Apply various feelinges and potential for his / her internship organization in particular and the sector in general.  Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.  Third Year-CSE-II  Course no.  Course no.  Acquire knowledge of different phases and passes of the compiler.			1		
Confidence and presentation skills.  To identifying topics of interest related to the program of study and make presentation  4 To Build Confidence while performing seminar work  5 Effective presentation and improve soft skills  Course no.  Course code Course name  Field training internship industrial training evaluation  COS After the successful completion of this course student will be able to:  Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.  Determine the challenges and potential for his / her internship organization in particular and the sector in general.  Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.  Third Year-CSE-II  Course no. Course no. Course code Course name Conpiler Design After the successful completion of this course student will be able to: Acquire knowledge of different phases and passes of the compiler.		techni	cal topics		
To identifying topics of interest related to the program of study and make presentation      To Build Confidence while performing seminar work      Seffective presentation and improve soft skills      Course no.      Course code      Course name      Field training internship industrial training evaluation      Cos      After the successful completion of this course student will be able to:      Integrate theory and practice.      Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.      Determine the challenges and potential for his / her internship organization in particular and the sector in general.      Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.      Third Year- CSE- II      Course no.      Course code     Course name      Coorse code     Course name      Coorse code     Course name      Coorse code     Course code     Course student will be able to:      After the successful completion of this course student will be able to:	• 2	To cla	rify, deepen the understanding ir	n the subject, and also increase	
To identifying topics of interest related to the program of study and make presentation      To Build Confidence while performing seminar work      Seffective presentation and improve soft skills      Course no.      Course code      Course name      Field training internship industrial training evaluation      Cos      After the successful completion of this course student will be able to:      Integrate theory and practice.      Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.      Determine the challenges and potential for his / her internship organization in particular and the sector in general.      Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.      Third Year- CSE- II      Course no.      Course code     Course name      Coorse code     Course name      Coorse code     Course name      Coorse code     Course code     Course student will be able to:      After the successful completion of this course student will be able to:		Confid	lence and presentation skills.		
and make presentation  4	• 3			l to the program of study	
<ul> <li>4</li></ul>				L O 01 04mm)	
<ul> <li>Course no.</li> <li>Course code</li> <li>Field training internship industrial training evaluation</li> <li>COS</li> <li>After the successful completion of this course student will be able to:         <ul> <li>Integrate theory and practice.</li> <li>Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.</li> <li>Determine the challenges and potential for his / her internship organization in particular and the sector in general.</li> </ul> </li> <li>Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.</li> <li>Third Year- CSE- II</li> <li>Course no.</li> <li>Course code</li> <li>Compiler Design</li> <li>COS</li> <li>After the successful completion of this course student will be able to:</li> <li>Acquire knowledge of different phases and passes of the compiler.</li> </ul>	• 4		-	seminar work	
C510     BTCOF411     Field training internship industrial training evaluation      COs     After the successful completion of this course student will be able to:     Integrate theory and practice.     Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.      Determine the challenges and potential for his / her internship organization in particular and the sector in general.      Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.      Third Year-CSE- II     Course no.     Course code     Course name     C601     BTCOC601     Compiler Design      After the successful completion of this course student will be able to:     Acquire knowledge of different phases and passes of the compiler.	• 5	• Effecti	ve presentation and improve sof	ft skills	
<ul> <li>CS10</li> <li>BTCOF411</li> <li>internship industrial training evaluation</li> <li>COs</li> <li>After the successful completion of this course student will be able to:         <ul> <li>Integrate theory and practice.</li> <li>Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.</li> <li>Determine the challenges and potential for his / her internship organization in particular and the sector in general.</li> </ul> </li> <li>Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.</li> <li>Third Year- CSE- II</li> <li>Course no.</li> <li>Course code</li> <li>Compiler Design</li> <li>COs</li> <li>After the successful completion of this course student will be able to:</li> <li>Acquire knowledge of different phases and passes of the compiler.</li> </ul>	• Course no		• Course code	Course name	
<ul> <li>After the successful completion of this course student will be able to:         <ul> <li>Integrate theory and practice.</li> <li>Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.</li> <li>Determine the challenges and potential for his / her internship organization in particular and the sector in general.</li> </ul> </li> <li>Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.</li> <li>Third Year- CSE- II</li> <li>Course no.</li> <li>Course code</li> <li>Compiler Design</li> <li>After the successful completion of this course student will be able to:</li> <li>Acquire knowledge of different phases and passes of the compiler.</li> </ul>	• C510		• BTCOF411	internship industrial training	
able to:  1 Integrate theory and practice. 2 Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.  3 Determine the challenges and potential for his / her internship organization in particular and the sector in general.  4 Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.  5 Third Year- CSE- II  5 Course no. 5 Course code 5 Course name 5 C601 5 BTCOC601 5 Compiler Design 5 COS 6 After the successful completion of this course student will be able to: 5 Acquire knowledge of different phases and passes of the compiler.	GO	A C	4 01 17 04		
<ul> <li>Apply various soft skills such as time managem ent, positive attitude and communication skills during performance of the tasks assigned in internship organization.</li> <li>Determine the challenges and potential for his / her internship organization in particular and the sector in general.</li> <li>Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.</li> <li>Third Year- CSE- II</li> <li>Course no.</li> <li>Course code</li> <li>Compiler Design</li> <li>COs</li> <li>After the successful completion of this course student will be able to:</li> <li>Acquire knowledge of different phases and passes of the compiler.</li> </ul>	• COs		_	is course student will be	
attitude and communication skills during performance of the tasks assigned in internship organization.  • 3 • Determine the challenges and potential for his / her internship organization in particular and the sector in general.  • 4 • Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.  • Third Year- CSE- II  • Course no. • Course code • Course name • C601 • BTCOC601 • Compiler Design • COs • After the successful completion of this course student will be able to: • 1 • Acquire knowledge of different phases and passes of the compiler.	• 1	• Integr	ate theory and practice.		
<ul> <li>internship organization in particular and the sector in general.</li> <li>4</li></ul>	• 2	attitude and communication skills during performance of the tasks			
<ul> <li>Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.</li> <li>Third Year- CSE- II</li> <li>Course no.</li> <li>Course code</li> <li>Course name</li> <li>C601</li> <li>BTCOC601</li> <li>Compiler Design</li> <li>COs</li> <li>After the successful completion of this course student will be able to:</li> <li>Acquire knowledge of different phases and passes of the compiler.</li> </ul>	• 3	• Deterr	nine the challenges and potentia	nl for his / her	
management structure, products / services offered, key achievements and market performance for his / her organization of internship.  Third Year- CSE- II  Course no. Course code Course name  Course name BTCOC601 Compiler Design  After the successful completion of this course student will be able to: Acquire knowledge of different phases and passes of the compiler.		intern	ship organization in particular a	nd the sector in general.	
◆ Course no.       ◆ Course code       ◆ Course name         ◆ C601       ◆ BTCOC601       ◆ Compiler Design         ◆ COs       ◆ After the successful completion of this course student will be able to:         ◆ 1       ◆ Acquire knowledge of different phases and passes of the compiler.	• 4	management structure, products / services offered, key achievements			
<ul> <li>C601</li> <li>■ BTCOC601</li> <li>■ Compiler Design</li> <li>■ COs</li> <li>■ After the successful completion of this course student will be able to:</li> <li>■ 1</li> <li>■ Acquire knowledge of different phases and passes of the compiler.</li> </ul>			• Third Year- CSE-	II	
<ul> <li>COs</li> <li>After the successful completion of this course student will be able to:</li> <li>Acquire knowledge of different phases and passes of the compiler.</li> </ul>	• Course no		• Course code	• Course name	
<ul> <li>COs</li> <li>After the successful completion of this course student will be able to:</li> <li>Acquire knowledge of different phases and passes of the compiler.</li> </ul>	• C601		• BTCOC601	Compiler Design	
• 1 • Acquire knowledge of different phases and passes of the compiler	<u> </u>				
j students will also be able to design unlerent types	• 1	• Acquir	re knowledge of different phases	•	

	of compiler tools to meet the requirements of the realistic					
		raints of compilers				
• 2	Understand the parser and its types i.e. Top-Down and					
	Bottom-up parsers and construction of LL, SLR, CLR, and LALR parsing					
	table.					
• 3	Describe intermediate code representations using syntax trees and					
	DAG l	DAG has as well as use this knowledge to generate intermediate code				
	in the	in the form of three address code				
	repre	sentations.				
• 4	<ul><li>Unde</li></ul>	rstand the target machine's	run time environment, its			
	instru	action set for code generation a	and techniques used for code			
	optin	nization				
• 5	• Sumn	narize various optimization techr	niques used for			
	dataf	low analysis.				
• Course no.		• Course code	• Course name			
• C602		BTCOC602	Computer Networks			
• COs	• After	the successful completion of the	is course student will be able			
	to:					
• 1		ze the requirements for a given o	organizational structure to select			
	the m	ost appropriate networking arch	itecture, topologies,			
		transmission mediums, and technologies				
• 2		onstrate design issues, flow contro				
	Client-Server architectures and prototypes by the means of correct					
	standards and technology. Local area					
	netwo	orks and wide area networks.				
• 3	• Analy	Analyze data flow between TCP/IP model using Application,				
	Trans	Transport and Network Layer Protocols				
• 4	• Demo	onstrate different routing and swi	tching algorithms			
• 5	• Illust	rate applications of Computer Ne	twork capabilities, selection			
		sage for various sectors of user c	•			
• Course no.		Course code	• Course name			
			Elective-V(b) Artificial			
• C603		• BTCOE603	Intelligence			
• COs	• After	the successful completion of thi	_			
		baccostal completion of the				
• 1	to:	derstand concepts of artificial int	telligence			
• 2	2					
• 3	To explain intelligent Agent and types of Environment?      To elaborate what is constraint, types of constraints.					
	To elaborate what is constraint, types of constraints  The address Different to the city of the city of the property of the city of the property of the city					
• 4		plore Different types of algorithm	is like bf5, df5, Iddf5,			
1	A*, RBFS etc.					

Course no	).	• Course code	• Course name	
• C604		• BTCOE 604	Internet of Things	
• COs	• After to:	the successful completion of	this course student will be able	
• 1	• Stude	nts can describe the IOT netv	work Architecture	
• 2		pare smart objects and associate network	ated technologies for deployment	
• 3	<ul><li>Descr</li></ul>	ibe IP layer and application p	protocols used in IOT	
• 4	• Elabo	rate Data and Analytics for I	OT	
• 5	• Build	IOT application with Arduir	no & Raspberry pi	
• Course no	).	• Course code	Course name	
• C605		• BTCOE605	<ul><li>Elective-VII</li><li>(c)Consumer</li><li>Behavior</li></ul>	
• COs	• After to:	the successful completion of	this course student will be able	
• 1	effecti	business communication stra ive communication for domes ational business	itegies and principles to prepare tic and	
• 2		fy ethical, legal, cultural, and g unication.	global issues affecting business	
• 3		ipate in team activities that le orative work skills	ad to the development of	
• 4		appropriate organizational for oping and presenting business		
• 5	<ul><li>Expre</li></ul>	ss an effective oral business p	resentation	
• Course no	<b>).</b>	<ul> <li>Course code</li> </ul>	• Course name	
• C606		• BTCOC606	<ul><li>Competitive</li><li>Programming II</li></ul>	
• COs	• After to:	the successful completion of	`this course student will be able	
• 1	• Analy:			
• 2	• Write	an algorithm for given proble	m statement	
• 3	Explain the flowchart for algorithm written for problem statement			
• 4		List and explain the data structures required to solve the problem statement		
• 5	• Imple staten	ment program for algorithm f nent	or given problem	

• 6	• Differ	entiate between the programm	ing languages and select proper
		r given problem statement	
• 7	Use fu	nctionalities to solve problem	statement
• Course no.		• Course code	• Course name
• C607		• BTCOL607	<ul> <li>Internet of things</li> </ul>
			Laboratory
• COs	• After	the successful completion of t	his course student will be able
_	to:	YOT 1:	
• 1		IOT application with Ardunio	
• 2		IOT application with Rasberry	· <del>-</del>
• 3		ment the connectivity of Ardu	
• 4		ment the connectivity of Rasb	
• 5	Build		unio & Rasberrypi with sensors
• Course no.		Course code	Course name
• C608		• BTCOL608	Computer Networks  Laborators
• COs	A G	41 C-1 1-4: C-4	Laboratory
• cos		the successful completion of t	his course student will be able
• 1	to:  • Worki	ng knowledge of datagram and	internet socket
		amming	The socket
• 2		n and test simple programs to i	mplement networking
	_	pts using Java.	
• 3	_	n simple data transmission usir	ng networking concepts and
	imple		
• 4		nstrate different routing and sv	
• 5	• Comp	are and analyze different existi	
• Course no.		• Course code	Course name
9600			• Field Training /
• C609		• BTCOF609	Internship/ Industrial Training
• COs	• After	the successful completion of t	his course student will be able
Cos		the successful completion of t	ms course student will be able
• 1	to:  • Integr	rate theory and practice.	
• 2			management, positive attitude
			formance of the tasks assigned in
		ship organization.	
• 3		mine the challenges and potent	ial for his / her
		ship organization in particular	•

• 4	mana <sub>i</sub> and m	ruct the company profile by comgement structure, products / ser arket performance for his / her ization of internship.		
		• Final Year- CSE-	I	
• Course no.		• Course code	• Course name	
• C701		• BTCOC701	• Software Engineering	
• COs	to:	the successful completion of the		
• 1		derstand and Know the Software work, Practice & Process Models		
• 2	relate	ing the key practices in extreme to the al Principles of agile methods	programming and how these	
• 3	• Under Stater	stand, analyze, and design using nent.	UML of real word problem	
• 4		and Implement real word problent techniques.	em Statement using UML	
• 5	develo	derstand Software testing, Development, se testing, User testing.	opment testing, Test- driven	
• 6		stand and Analyze the Dependal bility and reliability, Safety Secur		
• Course no.		• Course code	Course name	
• C702		• BTCOE702	<ul><li>Elective - VIII (B)</li><li>Distributed System</li></ul>	
• COs	to:	the successful completion of the		
• 1		fy the core concepts of distribute		
• 2		guish distributed computing par ıting paradigms (level 2)	radigm from other	
• 3	Illustrate the mechanisms of Inter process communication in distributed system (level 3)			
• 4	transp syster 3)	<ul> <li>Apply appropriate distributed system principles in ensuring transparency, consistency and fault-tolerance in distributed file system and avoid issues like, saturation, Deadlock (level</li> </ul>		
• 5		e the need for mutual exclusion at thms in distributed systems (leve		

C703     After the successful completion of this course student will be able to:      Tunderstand Cloud Computing, reference models, Virtualization along with the licensing of software's      design Cloud Computing Architecture, Types of Clouds and Challenges      After the successful completion of this course student will be able to:      design Cloud Computing Architecture, Types of Clouds and Challenges      Anow how to setup cloud enterprise with example of storage, database as a service      Alearn and Apply Aneka Cloud Platforms, SDK, Management Tools      "Implement and use the various services of cloud in different sectors like healthcare, finance, Business and consumer      Create cloud computing environment for sample organization using different tools      Apply Microsoft Azure and Implement cloud based application      Course no.      Course code     Course name      Open Elective - X     (A) Block chain Technology      After the successful completion of this course student will be able to:      Understand block chain technology.      Describe the working of bit coin crypto currency.	• Course no.		• Course code	• Course name
• 1 "Understand Cloud Computing, reference models, Virtualization along with the licensing of software's  • 2 • design Cloud Computing Architecture, Types of Clouds and Challenges  • 3 • know how to setup cloud enterprise with example of storage, database as a service  • 4 • Learn and Apply Aneka Cloud Platforms, SDK, Management Tools  • 5 "Implement and use the various services of cloud in different sectors like healthcare, finance, Business and consumer  "  • 6 • Create cloud computing environment for sample organization using different tools  • 7 • Apply Microsoft Azure and Implement cloud based application  • Course no.  • Course no.  • Course code  • Course name  • Open Elective - X (A) Block chain Technology  • COs  • After the successful completion of this course student will be able to:  • 1 • Understand block chain technology.	• C703		• BTCOE703	` *
Onderstand cloud Computing, reference models,     Virtualization along with the     licensing of software's     "      design Cloud Computing Architecture, Types of Clouds and Challenges     s	• COs		the successful completion of the	is course student will be able
Challenges  know how to setup cloud enterprise with example of storage, database as a service  Learn and Apply Aneka Cloud Platforms, SDK, Management Tools  "Implement and use the various services of cloud in different sectors like healthcare, finance, Business and consumer  "  Create cloud computing environment for sample organization using different tools  Apply Microsoft Azure and Implement cloud based application  Course no.  Course code  Course name  Crouse no.  After the successful completion of this course student will be able to:  Understand block chain technology.	• 1	Virtua licens	alization along with the	nce models,
database as a service  • 4 • Learn and Apply Aneka Cloud Platforms, SDK, Management Tools  • 5  "Implement and use the various services of cloud in different sectors like healthcare, finance, Business and consumer  "  • 6 • Create cloud computing environment for sample organization using different tools  • 7 • Apply Microsoft Azure and Implement cloud based application  • Course no.  • Course code • Course name  • C704 • BTC0E704 • BTC0E704  • After the successful completion of this course student will be able to:  • 1 • Understand block chain technology.	• 2	ū	• •	Types of Clouds and
<ul> <li>Implement and use the various services of cloud in different sectors like healthcare, finance, Business and consumer</li></ul>	• 3			ith example of storage,
Implement and use the various services of cloud in different sectors like healthcare, finance, Business and consumer  "  • 6 • Create cloud computing environment for sample organization using different tools  • 7 • Apply Microsoft Azure and Implement cloud based application  • Course no. • Course code • Course name  • C704 • BTC0E704 • BTC0E704 • After the successful completion of this course student will be able to:  • 1 • Understand block chain technology.	• 4	• Learn	and Apply Aneka Cloud Platform	ns, SDK, Management Tools
different tools  Apply Microsoft Azure and Implement cloud based application  Course no.  Course code Course name  Open Elective - X  (A) Block chain Technology  After the successful completion of this course student will be able to:  Understand block chain technology.	• 5	like he Busin	ealthcare, finance,	es of cloud in different sectors
Occurse no.       Course code       Course name         C704       ■ BTCOE704       ● Open Elective - X (A) Block chain Technology         COs       ■ After the successful completion of this course student will be able to:         ■ 1       ■ Understand block chain technology.	• 6			for sample organization using
<ul> <li>C704</li> <li>BTCOE704</li> <li>(A) Block chain Technology</li> <li>COs</li> <li>After the successful completion of this course student will be able to:</li> <li>Understand block chain technology.</li> </ul>	• 7		<del>-</del>	cloud based
<ul> <li>C704</li> <li>BTCOE704</li> <li>COs</li> <li>After the successful completion of this course student will be able to:         <ul> <li>Understand block chain technology.</li> </ul> </li> </ul>	• Course no.		• Course code	• Course name
to:  • 1 • Understand block chain technology.	• C704		• BTCOE704	(A) Block
	• COs		the successful completion of the	is course student will be able
Describe the working of bit coin crypto currency.	• 1	• Under	stand block chain technology.	
	• 2	• Descr	ibe the working of bit coin crypto	o currency.
<ul> <li>Build and deploy block chain application for on premise and cloud based architecture.</li> </ul>	• 3			
<ul> <li>Integrate ideas from various domains and implement them using block chain technology in different perspectives.</li> </ul>	• 4	_		
• 5 • Design smart contract using Ethereal.	• 5		Design smart contract using Ethereal.	
<ul> <li>Design smart contract using Hyperactive ledger Fabric frameworks.</li> </ul>	• 6			
• 7 • Understand The life of a Bit coin Miner.	• 7	Under	stand The life of a Bit coin Miner	:
● Course no.	• Course no.		• Course code	• Course name

• C705		• BTCOL705	Full Stack
			Development (LAMP / MEAN)
• COs	• After to:	the successful completion of the	is course student will be able
• 1		op skills necessary to design, dev nterfaces	velop and style a web based
• 2		op skills required to create lightvations using client side scripting	<u> </u>
• 3		op skill to use different JavaScrip oping responsive websites	t frameworks for
• 4	applic	op skills necessary to develop eff ations	
• 5		op ability to identify use cases fo cripting web technologies	r applying client and server
• Course no.		• Course code	• Course name
• C706		BTCOL706	• System
			Administration
• COs	• After	the successful completion of the	is course student will be able
	to:		
• 1	-	ment the successful installation	of different Linux
		rms like Ubuntu, centos	11 1
• 2	Build root lo		ver installed to enable or disable
• 3	• Imple	ment the successful installation (	of Telnet Server on Cent OS
• 4	• Imple	ment the FTP Server installation	on CentOS or Ubuntu
• 5	• Comp	lete the upload and download of	files using FTP server
• 6	• Comp	lete the installation of SAMBA an	nd HTTP Server on Ubuntu
• 7	• Comp	lete the installation of Proxy Serv	ver
• Course no.		• Course code	Course name
• C707		BTCOL707	Elective – VIII Lab
• COs	• After to:	the successful completion of the	is course student will be able
• 1	• Identi	fy the core concepts of distribute	ed systems (level 1)
• 2		guish distributed computing par uting paradigms (level 2)	radigm from other
• 3	• Illustr	rate the mechanisms of Inter producted system (level 3)	cess communication in

• 4	transp syster 3)	appropriate distributed sysparency, consistency and fault and avoid issues like, saturation	t-tolerance in distributed file n, Deadlock (level
• 5		e the need for mutual exclusion a thms in distributed systems (leve	
• Course no.		<ul> <li>Course code</li> </ul>	• Course name
• C708		• BTCOL708	• Elective – IX Lab
• COs	• After to:	the successful completion of the	is course student will be able
• 1		stand Cloud Computing, referend lization along with the licensing	
• 2	<ul><li>design</li><li>Challe</li></ul>	Cloud Computing Architecture,	Types of Clouds and
• 3	Challe		
• 4	Challe		
• 5	-	ment and use the various service ealthcare, finance, Business and o	
• 6		e cloud computing environment f ent tools	for sample organization using
• 7	Apply applic	Microsoft Azure and Implement ation	cloud based
• Course no.		• Course code	• Course name
• C709		• BTCOP709	Project phase - I
• COs	• After to:	the successful completion of the	is course student will be able
• 1		fy and formulate Engineering proustry & Society.	oblem addressing needs
• 2		act investigations of the Engineer lated by using Engineering res.	ring problem
• 3	consid	n and develop solution(s) for Engleration to public , safety, culture, society, envi	
• 4		e, select and apply modern tools in and developing	for investigating,

	Coluti	on (a) to ongine oning problem	
• 5		on (s) to engineering problem as individual and in team for con	
•	Mana And	ging the project work its fiancés.	
• 6		professional ethics while identifing the problem,	ying the problem,
	_	ning a solution to the problem, w mmunicating	_
	and	managing the project work and	its finances.
• 7	Devel	op ability for independent &	; lifelong learning.
• Course no.		• Course code	• Course name
• C710		• BTCOF609	<ul><li>Field Training / Internship / Industrial Training</li></ul>
• COs •	After to:	the successful completion of thi	is course student will be able
• 1	Integr	rate theory and practice.	
• 2	attitud	various soft skills such as time n de and communication skills dur ned in internship organization.	•
• 3		mine the challenges and future p Iship organization in particular a	
• 4	mana	ruct the company profile by comp gement structure, products / ser narket performance for his / her o	vices offered, key achievements
		• Final Year-CSE- I	I
• Course no.		<ul> <li>Course code</li> </ul>	• Course name
• C801		• BTCOE801	• Elective - XI # (A) Deep Learning
• COs •	After to:	the successful completion of thi	is course student will be able
• 1	compa	are modeling aspects of various r ectures	neural network
• 2 •	imple	ment simple neural network algo	orithms
• 3	apply	and evaluate deep learning on re	eal data sets
• 4	Impal	ement Linear regression, linear c	classifiers
• 5	_	are modeling aspects of various r ectures	neural network
• Course no.		• Course code	• Course name

• C802	BTC0E802	Open Elective – XII
		(A) Introduction to Industry 4.0 and Industrial  ■ Internet of Things
• COs	• After the successful completion to:	of this course student will be able
• 1	Understand Industry 4.0.	
• 2	Describe the working of Cyber see	curity in Industry 4.0.
• 3	Describe the Industrial Processes	
• 4	Understand Industrial IOT- Layer.	s.
• 5	Describe the Security and Fog Cor	mputing in Industrial IOT.
• 6	Design Industrial IOT- Application	n Domains: Healthcare.
• 7	<ul> <li>Design Industrial IOT- Application</li> </ul>	n Domains: pharmaceutical industry.
• Course n	o. • Course code	• Course name
• Course n • C803	• Course code  • BTCOE803	• Course name  Project phase - II  (In-house) \$  /  Internship and
		Project phase - II (In-house) \$ /
		Project phase - II (In-house) \$ / Internship and
	• BTCOE803	Project phase - II (In-house) \$ / Internship and project in the
• C803	BTC0E803      After the successful completion	Project phase - II (In-house) \$ / Internship and project in the Industry of this course student will be able
• C803	BTC0E803      After the successful completion to:	Project phase - II (In-house) \$ / Internship and project in the Industry of this course student will be able
• C803  • COs  • 1	After the successful completion to:     Apply concepts of project managements and the successful completion to:	Project phase - II (In-house) \$ / Internship and project in the Industry of this course student will be able gement.