



K.L.N. COLLEGE OF ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



BATCH: 2020 - 2024

REGULATION: R2020

S.No	Course Code	Semester	Subject Code	Subject Name	Course Outcome	Program Outcomes												Program Specific Outcome			
						PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2		
1	C101	I	20HS101	English for Technical Communication	C101.1	-	-	-	-	-	-	-	-	-	3	3	-	2	-	-	
					C101.2	-	-	-	-	-	-	-	-	-	3	3	-	2	-	-	
					C101.3	-	-	-	-	-	-	-	-	-	2	3	-	2	-	-	
					C101.4	-	-	-	-	-	-	-	-	-	2	3	-	2	-	-	
					C101.5	-	-	-	-	-	-	-	-	-	3	3	-	2	-	-	
					C101.6	-	-	-	-	-	-	-	-	-	-	3	3	-	2	-	-
					C101	-	-	-	-	-	-	-	-	-	-	3	3	-	2	-	-
2	C102	I	20BS101	Fundamentals of Engineering Mathematics	C102.1	3	2	1	-	-	-	-	1	1	-	-	-	2	-		
					C102.2	3	2	1	-	-	-	-	1	1	-	-	-	2	-		
					C102.3	3	2	1	-	-	-	-	1	1	-	-	-	2	-		
					C102.4	3	2	1	-	-	-	-	1	1	-	-	-	2	-		
					C102.5	3	2	1	-	-	-	-	1	1	-	-	-	2	-		
					C102.6	3	2	1	-	-	-	-	1	1	-	-	-	2	-		
					C102	3	2	1	-	-	-	-	1	1	-	-	-	2	-		
3	C103	I	20BS102	Engineering Physics	C103.1	3	2	1	-	-	-	-	-	-	-	-	-	1	-		
					C103.2	2	1	-	-	-	-	-	1	1	1	-	-	1	-		
					C103.3	2	1	-	-	-	-	-	1	1	1	-	-	1	-		
					C103.4	2	1	-	-	-	-	-	1	1	1	-	-	1	-		
					C103.5	3	2	1	-	-	-	-	-	-	-	-	-	1	-		
					C103.6	2	1	-	-	-	-	-	1	1	1	-	-	1	-		
					C103	2	1	1	-	-	-	-	1	1	1	-	-	1	-		
4	C104	I	20BS103	Engineering Chemistry	C104.1	2	2	-	-	-	1	1	-	-	-	-	-	-	-		
					C104.2	3	2	1	-	-	-	1	1	-	-	-	-	1	-		
					C104.3	2	1	-	-	-	-	-	-	-	-	-	-	-	-		
					C104.4	2	1	-	-	-	-	1	1	-	-	-	-	1	-		
					C104.5	2	1	-	-	-	-	1	1	-	-	-	-	1	-		
					C104.6	2	1	1	-	-	-	1	1	-	-	-	-	1	-		
					C104	2	1	1	-	-	-	1	1	-	-	-	-	1	-		
5	C105	I	20GE101	Problem Solving using Python Programming	C105.1	2	1	-	-	-	-	-	1	1	-	-	2	2	1		
					C105.2	2	1	-	-	-	-	-	1	1	-	-	2	2	1		
					C105.3	3	2	1	-	-	-	-	1	1	-	-	2	2	1		
					C105.4	3	2	1	-	-	-	-	1	1	-	-	2	2	1		
					C105.5	3	2	1	-	-	-	-	1	1	-	-	2	2	1		
					C105.6	3	2	1	-	-	-	-	1	1	-	-	2	2	1		
					C105	3	2	1	-	-	-	-	1	1	-	-	2	2	1		
6	C106	I	20BS1L1	BASIC SCIENCE LABORATORY	C106.1	3	2	1	-	-	-	-	1	1	1	-	-	1	-		
					C106.2	3	2	1	-	-	-	-	1	1	1	-	-	1	-		
					C106.3	3	2	1	-	-	-	-	1	1	1	-	-	1	-		
					C106.4	2	1	-	-	-	-	-	1	1	1	-	-	1	-		
					C106.5	3	2	1	-	-	-	-	1	1	1	-	-	-	-		
					C106.6	3	2	1	-	-	-	-	1	1	1	-	-	-	-		

					C106.7	3	2	1	-	-	-	-	1	1	1	-	-	-	-
					C106.8	2	1	-	-	-	-	-	-	-	-	-	-	1	-
					C106	3	2	1	-	-	-	-	1	1	1	-	-	1	-
	C107	I	20GE1L1	Python Programming Laboratory	C107.1	3	2	1	-	1	-	-	2	2	2	-	2	2	1
					C107.2	3	2	1	-	1	-	-	2	2	2	-	2	2	1
					C107.3	3	2	1	-	1	-	-	2	2	2	-	2	2	1
					C107.4	3	2	1	-	1	-	-	2	2	2	-	2	2	1
					C107.5	3	2	1	-	1	-	-	2	2	2	-	2	2	1
					C107.6	3	2	1	-	1	-	-	2	2	2	-	2	2	1
					C107	3	2	1	-	1	-	-	2	2	2	-	2	2	1
	C108	I	20GE1L2	INDUSTRIAL PRACTICES LABORATORY	C108.1	3	1	1	1	-	-	-	-	-	-	-	-	-	
					C108.2	3	1	1	1	-	-	-	-	-	-	-	-	-	
					C108.3	3	1	1	1	-	-	-	-	-	-	-	-	-	
					C108.4	3	2	1	1	-	-	-	-	-	-	-	-	-	
					C108.5	3	2	1	1	-	-	2	-	2	2	-	-	-	
					C108.6	3	2	1	1	-	-	2	-	2	2	-	-	-	
					C108.7	3	2	1	1	-	-	2	-	2	2	-	-	-	
					C108.8	3	2	1	1	-	-	2	-	2	2	-	-	-	
				C108	3	2	1	1	-	-	2	-	2	2	-	-	-		
	C109	II	20HS201	ADVANCED TECHNICAL COMMUNICATION	C109.1	-	-	-	-	-	-	-	-	3	3	-	2	-	
					C109.2	-	-	-	-	-	-	-	-	-	3	3	-	2	-
					C109.3	-	-	-	-	-	-	-	-	-	3	3	-	2	-
					C109.4	-	-	-	-	-	-	-	-	-	2	3	-	2	-
					C109.5	-	-	-	-	-	-	-	-	-	3	3	-	2	-
					C109.6	-	-	-	-	-	-	-	-	-	3	3	-	2	-
					C109	-	-	-	-	-	-	-	-	-	3	3	-	2	-
	C110		20BS201	Laplace Transform and Advanced Calculus	C110.1	3	2	1	-	-	-	-	1	1	-	-	-	-	
					C110.2	3	2	1	-	-	-	-	1	1	-	-	-	-	
					C110.3	3	2	1	-	-	-	-	1	1	-	-	-	-	
					C110.4	3	2	1	-	-	-	-	1	1	-	-	-	1	
					C110.5	3	2	1	-	-	-	-	1	1	-	-	-	1	
					C110.6	3	2	1	-	-	-	-	1	1	-	-	-	1	
					C110	3	2	1	-	-	-	-	1	1	-	-	-	1	
	C111		20BS201	Physics for Information Science	C111.1	2	1	-	-	-	-	-	-	-	-	-	-	-	
					C111.2	3	2	1	-	-	-	-	1	1	1	-	-	-	
					C111.3	2	1	-	-	-	-	-	1	1	1	-	-	-	
					C111.4	2	1	-	-	-	-	-	1	1	1	-	-	-	
					C111.5	2	1	-	-	-	-	-	-	-	-	-	-	1	
					C111.6	2	1	-	-	-	-	-	1	1	1	-	-	1	
					C111	2	1	-	-	-	-	-	1	1	1	-	-	1	
	C112		20EE201	Basic Electrical and Electronics Engineering	C112.1	2	1	-	-	-	-	-	-	-	-	-	-	-	
					C112.2	3	2	1	-	-	-	-	-	-	-	-	-	-	
					C112.3	2	1	-	-	-	-	-	-	-	-	-	-	-	
					C112.4	2	1	-	-	-	-	-	-	-	-	-	-	-	
					C112.5	2	1	-	-	-	-	-	-	-	-	-	-	-	
					C112.6	2	1	-	-	-	-	-	-	-	-	-	-	-	
					C112	2	1	-	-	-	-	-	-	-	-	-	-	-	
				Programming	C113.1	3	2	1	-	-	-	-	1	1	2	-	2	3	
					C113.2	3	2	1	-	-	-	-	1	1	2	-	2	3	
					C113.3	3	2	1	-	-	-	-	1	1	2	-	2	3	

	C113		20CS201	Programming in C	C113.4	3	2	1	-	-	-	-	1	1	2	-	2	3	-
					C113.5	3	3	2	1	-	-	-	2	2	2	-	2	3	1
					C113.6	3	2	1	-	-	-	-	1	1	2	-	2	3	1
					C113	3	2	1	-	-	-	-	1	1	2	-	2	3	1
	C114		20GE201	Engineering Graphics	C114.1	2	1	-	-	-	-	-	1	-	-	-	-	-	-
					C114.2	3	2	1	-	-	-	-	1	-	-	-	-	-	-
					C114.3	3	2	1	-	-	-	-	1	-	-	-	-	-	-
					C114.4	3	2	1	-	-	-	-	1	-	-	-	-	-	-
					C114.5	3	2	1	-	-	-	-	1	-	-	-	-	-	-
					C114.6	3	2	1	-	-	-	-	1	-	-	-	-	-	-
					C114	3	2	1	-	-	-	-	1	-	-	-	-	-	-
	C115		20HS2L1	Communication Skills Laboratory	C115.1	-	-	-	-	-	-	-	-	2	3	-	3	-	-
					C115.2	-	-	-	-	-	-	-	-	2	3	-	3	-	-
					C115.3	-	-	-	-	-	-	-	-	3	3	-	3	-	-
					C115.4	-	-	-	-	-	-	-	-	2	3	-	3	-	-
					C115.5	-	-	-	-	-	-	-	-	3	3	-	3	-	-
					C115.6	-	-	-	-	-	-	-	-	2	3	-	3	-	-
					C115	-	-	-	-	-	-	-	-	2	3	-	3	-	-
	C116	II	20CS2L1	C Programming Laboratory	C116.1	3	2	1	-	-	-	-	2	2	1	-	2	3	1
					C116.2	3	2	1	-	-	-	-	2	2	1	-	2	3	1
					C116.3	3	2	1	-	-	-	-	2	2	1	-	2	3	1
					C116.4	3	2	1	-	-	-	-	2	2	1	-	2	3	1
					C116.5	3	2	1	-	-	-	-	2	2	1	-	2	3	2
					C116.6	3	2	1	-	-	-	-	2	2	1	-	2	3	2
					C116	3	2	1	-	-	-	-	2	2	1	-	2	3	2
	C201	III	20BS303	DISCRETE MATHEMATICS	C201.1	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C201.2	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C201.3	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C201.4	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C201.5	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C201.6	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C201	3	2	1	-	-	-	-	1	1	-	-	-	1	-
	C202	III	20CS301	Digital Principles and System Design	C202.1	3	2	1	-	-	-	-	1	1	-	-	1	3	-
					C202.2	3	2	1	-	-	-	-	1	1	-	-	1	3	-
					C202.3	3	3	2	1	-	-	-	1	1	-	-	1	3	-
					C202.4	3	2	1	-	-	-	-	1	1	-	-	1	3	-
					C202.5	3	3	2	1	-	1	-	1	1	-	-	1	3	-
					C202.6	3	2	1	-	-	-	-	1	1	-	-	1	3	-
					C202	3	2	1	1	-	1	-	1	1	-	-	1	3	-
	C203	III	20CS302	DATA STRUCTURES AND ALGORITHMS	C203.1	2	1	-	-	-	-	-	1	1	-	-	2	2	-
					C203.2	2	1	-	-	-	-	-	1	1	-	-	2	3	-
					C203.3	3	2	1	-	-	-	-	1	1	-	-	2	3	-
					C203.4	3	2	1	-	-	-	-	1	1	1	-	2	3	-
					C203.5	3	3	2	1	-	-	-	1	1	1	-	2	3	-
					C203.6	3	2	1	-	-	-	-	1	1	1	-	2	3	-
					C203	3	2	1	1	-	-	-	1	1	1	-	2	3	-
					C204.1	3	2	1	-	-	-	-	-	2	-	-	-	2	-
					C204.2	3	2	1	-	-	-	-	-	2	-	-	-	2	-
					C204.3	3	2	1	-	-	-	-	-	2	-	-	-	2	-

	C204	III	20EC304	DIGITAL COMMUNICATION	C204.4	3	2	1	-	-	-	-	-	2	-	-	-	2	-
					C204.5	3	2	1	-	-	-	-	-	2	-	-	-	2	-
					C204.6	2	1	-	-	-	-	-	-	2	2	-	-	1	-
					C204	3	2	1	-	-	-	-	-	2	2	-	-	2	-
	C205	III	20HS301	Universal Human Values	C205.1	-	-	-	-	-	3	2	3	2	2	-	1	-	-
					C205.2	-	-	-	-	-	3	2	3	2	2	-	1	-	-
					C205.3	-	-	-	-	-	3	2	3	2	2	-	1	-	-
					C205.4	-	-	-	-	-	3	2	3	2	2	-	1	-	-
					C205.5	-	-	-	-	-	3	2	3	2	2	-	1	-	-
					C205.6	-	-	-	-	-	3	2	3	2	2	-	1	-	-
					C205	-	-	-	-	-	3	2	3	2	2	-	1	-	-
	C206	III	20CS3L1	DIGITAL SYSTEMS LABORATORY	C206.1	3	2	1	-	-	-	-	1	1	1	-	1	3	-
					C206.2	3	2	1	-	-	-	-	1	1	1	-	1	3	-
					C206.3	3	2	1	-	-	-	-	1	1	1	-	1	3	-
					C206.4	3	2	1	-	-	-	-	1	1	1	-	1	3	-
					C206.5	3	2	1	-	-	-	-	1	1	1	-	1	3	-
					C206.6	3	2	1	-	-	-	-	1	1	1	1	1	3	1
					C206	3	2	1	-	-	-	-	1	1	1	1	1	3	1
	C207	III	20CS3L2	Data Structures And Algorithms Laboratory	C207.1	3	2	1	-	-	-	-	1	1	1	-	2	3	-
					C207.2	3	2	1	-	-	-	-	1	1	1	-	2	3	-
					C207.3	3	2	1	-	-	-	-	1	1	1	-	2	3	-
					C207.4	3	2	1	-	-	-	-	1	1	1	-	2	3	-
					C207.5	3	3	2	1	-	-	-	1	1	1	-	2	3	-
					C207.6	3	3	2	1	-	-	-	1	1	1	1	2	3	-
					C207	3	2	1	1	-	-	-	1	1	1	1	2	3	-
	C208	III	20CS3L3	OBJECT ORIENTED PROGRAMMING LABORATORY	C208.1	3	2	1	-	-	-	-	1	1	1	-	2	3	1
					C208.2	3	2	1	-	-	-	-	1	1	1	-	2	3	1
					C208.3	3	2	1	-	-	-	-	1	1	1	-	2	3	1
					C208.4	3	2	1	-	1	-	-	1	1	1	-	2	3	1
					C208.5	3	2	1	-	1	-	-	1	1	1	1	2	3	1
					C208.6	3	3	2	1	1	-	-	1	1	1	1	2	3	1
					C208	3	2	1	1	1	-	-	1	1	1	1	2	3	1
	C209	IV	20BS403	PROBABILITY , STATISTICS AND QUEUEING THEORY	C209.1	3	2	1	-	-	-	-	1	1	-	-	-	-	-
					C209.2	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C209.3	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C209.4	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C209.5	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C209.6	3	2	1	-	-	-	-	1	1	-	-	-	1	-
					C209	3	2	1	-	-	-	-	1	1	-	-	-	1	-
	C210	IV	20CS401	COMPUTER ORGANIZATION AND ARCHITECTURE	C210.1	2	1	-	-	-	-	-	-	-	-	-	-	2	-
					C210.2	3	2	1	-	-	-	-	1	1	-	-	-	3	-
					C210.3	2	1	-	-	-	-	-	1	1	1	-	1	2	-
					C210.4	2	1	-	-	-	-	-	1	1	-	-	1	2	-
					C210.5	2	1	-	-	-	-	-	1	1	1	-	1	2	-
					C210.6	3	2	1	-	1	-	-	1	1	-	-	1	2	1
					C210	3	2	1	-	1	-	-	1	1	1	-	1	2	1
					C211.1	2	1	-	-	-	-	-	-	-	-	-	1	3	1
					C211.2	3	2	1	-	-	-	-	1	1	-	-	1	3	-

C211	IV	20CS402	DATABASE MANAGEMENT SYSTEMS	C211.3	3	2	1	-	1	-	-	1	1	1	-	1	3	-	
				C211.4	3	2	1	-	-	-	-	1	1	1	-	1	3	1	
				C211.5	3	2	1	-	-	-	-	1	1	1	-	1	3	1	
				C211.6	3	3	2	1	1	-	-	1	1	-	-	1	3	1	
				C211.7	3	2	1	-	1	-	-	1	1	-	-	1	3	1	
				C211	3	2	1	1	1	-	-	1	1	1	-	1	3	1	
C212	IV	20CS403	DESIGN AND ANALYSIS OF PARALLEL ALGORITHMS	C212.1	3	2	1	-	-	-	-	1	1	-	-	1	3	-	
				C212.2	3	2	1	-	-	-	-	1	1	-	-	1	3	-	
				C212.3	3	3	2	1	-	-	-	-	1	1	-	-	1	3	-
				C212.4	2	1	-	-	-	-	-	-	-	-	-	-	-	3	-
				C212.5	3	2	1	-	-	-	-	1	1	1	-	1	3	-	
				C212.6	3	2	1	-	-	-	-	1	1	1	-	1	3	-	
C212	3	2	1	-	-	-	-	1	1	1	-	1	3	-					
C213	IV	20HS401	Environment al Science and Engineering	C213.1	-	-	-	-	-	2	3	-	-	-	-	-	-	-	
				C213.2	-	-	-	-	-	2	3	-	-	-	-	-	-	-	
				C213.3	-	-	-	-	-	2	3	-	-	-	-	-	-	-	
				C213.4	-	-	-	-	-	2	3	-	-	-	-	-	-	-	
				C213.5	-	-	-	-	-	2	3	-	-	-	-	-	-	-	
				C213.6	-	-	-	-	-	2	3	-	-	-	-	-	-	-	
C213	-	-	-	-	-	2	3	-	-	-	-	-	-	-					
C214	IV	20CS404	OPERATING SYSTEMS	C214.1	3	2	1	-	-	-	-	1	1	1	-	1	3	-	
				C214.2	3	3	2	1	-	-	-	-	1	1	1	-	1	3	-
				C214.3	3	2	1	-	-	-	-	1	1	1	-	1	3	-	
				C214.4	3	2	1	-	-	-	-	1	1	1	-	1	3	-	
				C214.5	3	2	1	-	-	-	-	1	1	1	-	1	3	-	
				C214.6	3	2	1	-	-	-	-	1	1	1	-	1	3	-	
				C214.7	3	2	1	-	1	1	-	1	1	1	-	1	3	-	
C214	3	2	1	1	1	1	-	1	1	1	-	1	3	-					
C215	IV	20CS4L1	DATABASE MANAGEMENT SYSTEMS LAB	C215.1	3	2	1	-	-	-	-	1	1	1	-	1	3	1	
				C215.2	3	2	1	-	-	-	-	1	1	1	-	1	3	1	
				C215.3	3	2	1	-	-	-	-	1	1	1	-	1	3	1	
				C215.4	3	2	1	-	-	-	-	1	1	1	-	1	3	1	
				C215.5	3	2	1	-	1	-	-	1	1	1	-	1	3	2	
				C215.6	3	2	1	-	1	-	-	1	1	1	-	1	3	2	
C215	3	2	1	-	1	-	-	1	1	1	-	1	3	1					
C216	IV	20HS4L2	PROFESSIONAL COMMUNICATION LABORATORY	C216.1	-	-	-	-	-	-	-	-	2	3	-	3	-	-	
				C216.2	-	-	-	-	-	-	-	-	2	3	-	3	-	-	
				C216.3	-	-	-	-	-	-	-	-	3	3	-	3	-	-	
				C216.4	-	-	-	-	-	-	-	-	2	3	-	3	-	-	
				C216.5	-	-	-	-	-	-	-	-	3	3	-	3	-	-	
				C216.6	-	-	-	-	-	-	-	-	2	3	-	3	-	-	
C216	-	-	-	-	-	-	-	-	2	3	-	3	-	-					
C301	V	20CS501	COMPUTER NETWORKS	C301.1	2	1	-	-	-	-	-	-	-	-	1	2	-		
				C301.2	3	2	1	-	-	-	-	1	1	-	-	1	2	-	
				C301.3	3	2	1	-	-	-	-	1	1	-	-	1	2	-	
				C301.4	3	2	1	-	-	-	-	1	1	1	-	1	2	-	
				C301.5	2	1	-	-	-	-	-	1	1	1	-	1	2	-	
				C301.6	3	2	1	-	-	-	-	1	1	1	-	1	2	-	

					C301	3	2	1	-	-	-	-	1	1	1	-	1	2	-
					C302.1	2	1	-	-	-	-	-	-	-	-	-	-	-	1
					C302.2	3	2	1	-	-	-	-	1	1	-	-	1	1	1
					C302.3	3	2	1	-	1	-	-	1	1	-	-	1	1	1
					C302.4	2	1	-	-	-	-	-	1	1	1	-	1	1	1
					C302.5	3	2	1	-	-	-	-	1	1	1	-	1	1	1
					C302.6	2	1	-	-	-	-	-	1	1	1	-	1	1	1
					C302	3	2	1	-	1	-	-	1	1	1	-	1	1	1
					C303.1	3	2	1	-	-	-	-	2	2	1	-	1	3	1
					C303.2	3	2	1	-	-	-	-	2	2	-	-	1	3	1
					C303.3	3	2	1	-	-	-	-	2	2	-	-	1	3	1
					C303.4	3	2	1	-	-	-	-	2	2	-	-	1	3	1
					C303.5	3	2	1	-	-	-	-	2	2	-	-	1	3	1
					C303.6	3	2	1	-	-	-	-	2	2	1	-	1	3	1
					C303	3	2	1	-	-	-	-	2	2	1	-	1	3	1
					C304.1	2	1	-	-	-	-	-	-	-	-	-	-	1	-
					C304.2	2	1	-	-	-	-	-	1	1	1	-	-	1	-
					C304.3	2	1	-	-	-	-	-	1	1	1	-	-	1	-
					C304.4	2	1	-	-	-	-	-	1	1	-	-	-	1	-
					C304.5	2	1	-	-	-	-	-	1	1	-	-	1	1	-
					C304.6	2	1	-	-	-	-	-	1	1	1	-	1	1	-
					C304	2	1	-	-	-	-	-	1	1	1	-	1	1	-
					C305.1	2	1						1	1		1	1		
					C305.2	2	1						1	1		1	1		
					C305.3	3	3	2	1				1	1	1	1	1	1	
					C305.4	2	1						1	1		1	1		
					C305.5	2	1						1	1		1	1		
					C305.6	2	1						1	1	1	1	1		1
					C305	2	1	2	1				1	1	1	1	1	1	1
					C306.1	-	-	-	-	-	3	-	2	2	2	-	-	-	-
					C306.2	-	-	-	-	-	3	-	2	2	2	-	-	-	-
					C306.3	-	-	-	-	-	3	-	2	2	2	-	-	-	-
					C306.4	-	-	-	-	-	3	-	2	2	2	-	-	-	-
					C306.5	-	-	-	-	-	3	-	2	2	2	-	-	-	-
					C306	-	-	-	-	-	3	-	2	2	2	-	-	-	-
					C307.1	3	2	1	-	-	-	-	2	2	3	-	-	2	2
					C307.2	3	2	1	-	-	-	-	2	2	3	-	-	2	2
					C307.3	3	2	1	-	-	-	-	2	2	3	-	-	2	2
					C307.4	3	3	2	1	-	-	-	2	2	3	-	-	2	2
					C307.5	3	2	1	-	-	-	-	2	2	3	-	-	2	2
					C307.6	3	3	2	1	-	-	-	2	2	3	-	-	2	2
					C307	-	-	-	-	-	-	-	2	2	3	-	-	2	2
					C308.1	3	2	1	-	-	-	-	2	2	3	-	-	1	1
					C308.2	3	2	1	-	-	-	-	2	2	3	-	-	1	1
					C308.3	3	3	2	1	-	-	-	2	2	3	-	-	1	1
					C308.4	3	2	1	-	-	-	-	2	2	3	-	-	1	1
					C308.5	3	2	1	-	-	-	-	2	2	3	-	-	1	1
					C308.6	3	3	2	1	-	-	-	2	2	3	-	-	1	1
					C308	3	2	1	1	-	-	-	2	2	3	-	-	1	1

CE314	VI	20CS6A2	Computer Graphics And Multimedia	CE314.2	3	2	1	-	-	-	-	1	1	1	-	1	2	1			
				CE314.3	2	1	-	-	-	-	-	-	-	-	-	-	-	-	2	1	
				CE314.4	3	2	1	-	-	-	-	1	1	1	-	1	2	1			
				CE314.5	2	1	-	-	-	-	-	1	1	1	-	-	2	1			
				CE314.6	2	1	-	-	-	-	-	1	1	1	-	-	2	1			
				CE314	2	1	1	-	-	-	-	-	-	-	-	-	2	1			
				CE314.1	2	1	-	-	-	-	-	-	-	-	-	1	1	-			
CE314	VI	20CS6A3	Graph Theory And Applications	CE314.2	2	1	-	-	-	-	-	1	1	1	-	1	1	-			
				CE314.3	2	1	-	-	-	-	-	-	-	-	1	1	-				
				CE314.4	3	2	1	-	-	-	-	1	1	1	-	1	1	-			
				CE314.5	3	2	1	-	-	-	-	1	1	1	-	1	1	-			
				CE314.6	3	2	1	-	-	-	-	2	2	1	-	1	1	-			
				CE314	3	2	1	-	-	-	-	1	1	1	-	1	1	-			
				CE314.1	2	1	-	-	-	-	-	-	-	-	-	1	1	-			
CE314	VI	20CS6A4	System Software	CE314.2	2	1	-	-	-	-	-	1	1	1	-	-	1	-			
				CE314.3	2	1	-	-	-	-	-	1	1	1	-	-	1	-			
				CE314.4	2	1	-	-	-	-	-	-	-	-	-	-	1	-			
				CE314.5	2	1	-	-	-	-	-	-	-	-	-	-	1	-			
				CE314.6	2	1	-	-	-	-	-	1	1	1	-	1	1	-			
				CE314	2	1	-	-	-	-	-	1	1	1	-	1	1	-			
				CE314.1	2	1	-	-	-	-	-	-	-	1	-	-	1	-			
CE314	VI	20IT6A2	Software Testing	CE314.2	3	2	1	-	-	-	-	-	-	-	1	-	1				
				CE314.3	2	1	-	-	-	-	-	-	1	-	-	1	-				
				CE314.4	2	1	-	-	-	-	-	-	-	-	-	1	1	-			
				CE314.5	3	2	1	-	-	-	-	-	-	1	-	-	-	1			
				CE314.6	2	1	-	-	-	-	-	-	-	-	-	1	-	-			
				CE314	3	2	1	-	-	-	-	-	-	1	-	1	1	1			
				CE314.1	2	1	-	-	-	-	-	-	-	1	-	-	1	-			
CE314	VI	20IT6A4	Real Time Systems	CE314.2	2	1	-	-	-	-	-	-	-	-	1	1	-				
				CE314.3	2	1	-	-	-	-	-	-	-	1	-	-	1	-			
				CE314.4	2	1	-	-	-	-	-	-	-	-	-	1	1	-			
				CE314.5	2	1	-	-	-	-	-	-	-	1	-	-	1	-			
				CE314.6	2	1	-	-	-	-	-	-	-	-	-	1	1	-			
				CE314	2	1	-	-	-	-	-	-	-	1	-	1	1	-			
				C315.1	-	-	-	-	-	2	-	2	-	-	-	-	-	-	-		
C315	VI	20MC601	ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE	C315.2	-	-	-	-	-	2	-	2	-	-	-	-	-				
				C315.3	-	-	-	-	-	2	-	2	-	-	-	-	-	-			
				C315.4	-	-	-	-	-	2	-	2	-	-	-	-	-	-			
				C315.5	-	-	-	-	-	2	-	2	-	-	-	-	-	-			
				C315.6	-	-	-	-	-	2	-	2	-	-	-	-	-	-			
				C315	-	-	-	-	-	2	-	2	-	-	-	-	-	-	-		
				C316.1	3	2	1	-	-	-	-	2	2	2	-	2	3	1			
C316	VI	20CS604	MACHINE LEARNING	C316.2	3	2	1	-	-	-	-	2	2	2	-	2	3	1			
				C316.3	3	2	1	-	-	-	-	2	2	2	-	2	3	1			
				C316.4	3	2	1	-	-	-	-	2	2	2	-	2	3	1			
				C316.5	3	3	2	1	-	1	-	2	2	2	1	2	3	1			
				C316.6	3	3	2	1	1	-	-	2	2	2	1	2	3	1			
				C316	3	2	1	1	1	1	-	2	2	2	1	2	3	1			

C317	VI	20CS6L1	Mobile Application Development Laboratory	C317.1	3	2	1	-	-	-	-	2	2	3	-	1	2	3		
				C317.2	3	2	1	-	-	-	-	2	2	3	-	1	2	3		
				C317.3	3	2	1	-	-	-	-	2	2	3	-	1	2	3		
				C317.4	3	2	1	-	-	-	-	2	2	3	-	1	2	3		
				C317.5	3	2	1	-	-	-	-	2	2	3	-	2	2	3		
				C317.6	3	3	2	1	1	1	-	2	3	3	1	3	2	3		
				C317	3	2	1	1	1	1	-	2	2	3	1	2	2	3		
C318	VI	20CS6L2	WEB TECHNOLOGY LABORATORY	C318.1	2	1	-	-	-	-	-	2	2	1	-	-	-	2		
				C318.2	2	1	-	-	-	-	-	2	2	1	-	-	-	-	2	
				C318.3	3	3	2	1	-	-	-	2	2	3	-	1	-	-	2	
				C318.4	3	3	2	1	-	-	-	2	2	3	-	1	-	-	2	
				C318.5	3	2	1	-	-	-	-	2	2	3	-	1	-	-	2	
				C318.6	3	2	1	-	1	-	-	2	3	3	-	1	-	-	2	
				C318	3	2	1	1	1	-	-	2	2	3	3	1	-	-	2	
C401	VII	20CS701	Data Analytics	C401.1	2	1	-	-	-	-	-	1	1	-	-	-	1	-		
				C401.2	2	1	-	-	-	-	-	1	1	1	-	-	-	1	-	
				C401.3	2	1	-	-	-	-	-	1	1	1	-	-	-	1	-	
				C401.4	3	2	1	-	-	-	-	1	1	-	-	1	1	-		
				C401.5	3	2	1	-	-	-	-	1	1	-	-	1	1	-		
				C401.6	2	1	-	-	1	-	-	1	1	-	-	1	1	2		
				C401	2	1	1	-	1	-	-	1	1	1	-	1	1	1		
C402	VII	20CS702	ARTIFICIAL INTELLIGENCE	C402.1	2	1	-	-	-	-	-	1	1	1	-	-	2	-		
				C402.2	2	1	-	-	-	-	-	1	1	1	-	-	-	2	-	
				C402.3	2	1	-	-	-	-	-	1	1	1	-	-	-	2	-	
				C402.4	3	2	1	-	-	-	-	1	1	1	-	-	-	2	-	
				C402.5	2	1	-	-	-	-	-	1	1	1	-	-	-	2	-	
				C402.6	2	1	-	-	-	-	-	1	1	1	-	-	-	2	-	
				C402	2	1	1	-	-	-	-	1	1	1	-	-	-	2	-	
C403	VII	20OE108	Industrial Safety Practices	C403.1																
				C403.2																
				C403.3																
				C403.4																
				C403.5																
				C403.6																
				C403																
CE404	VII	20CS7A1	Cloud Computing	CE404.1	2	1	-	-	-	-	-	1	1	1	-	-	2	2		
				CE404.2	2	1	-	-	-	-	-	1	1	1	-	-	-	2	2	
				CE404.3	2	1	-	-	-	-	-	1	1	1	-	-	-	2	2	
				CE404.4	2	1	-	-	-	-	-	1	1	1	-	-	-	2	2	
				CE404.5	2	1	-	-	-	-	-	1	1	1	-	-	-	2	2	
				CE404.6	3	2	1	-	-	-	-	1	1	1	-	-	-	2	2	
				CE404	2	1	1	-	-	-	-	1	1	1	-	-	-	2	2	
CE404	VII	20CS7A2	Agile Methodologies	CE404.1	2	1						1	1	1	1		1	2		
				CE404.2	2	1						1	1	1	1			1	2	
				CE404.3	2	1						1	1	1	1				1	2
				CE404.4	2	1				1			1	1	1				1	2
				CE404.5	2	1							1	1	1	1				1

				CE404.6	2	1			1			1	1	1		1	2	
				CE404	2	1			1			1	1	1	1		1	2
	CE404	VII	20CS7A3	Java Scripting	CE404.1	3	2	1				1	1	1			2	
					CE404.2	2	1					1	1	1			2	
					CE404.3	2	1					1	1	1			2	
					CE404.4	2	1					1	1	1			2	
					CE404.5	3	2	1				1	1	1				2
					CE404.6	2	1					1	1	1				2
					CE404	2	1	1				1	1	1			2	2
	CE404	VII	20CS7A4	Natural Language Processing	CE404.1	2	1					1	1	1			2	2
					CE404.2	2	1					1	1	1			2	2
					CE404.3	2	1					1	1	1			2	2
					CE404.4	2	1					1	1	1			2	2
					CE404.5	3	2	1				1	1	1			2	2
					CE404.6	3	2	1		2		1	1	1			2	2
					CE404	2	1	1		2		1	1	1			2	2
	CE404	VII	20CS7A5	Advanced Topics on Databases	CE404.1	2	1					1	1	1			2	
					CE404.2	3	2	1				1	1	1			2	
					CE404.3	2	1			1		1	1	1			2	
					CE404.4	2	1					1	1	1			2	
					CE404.5	2	1					1	1	1			2	
					CE404.6	2	1			1		1	1	1			2	
					CE404	2	1	1		1		1	1	1			2	
	CE404	VII	20IT601	Internet of Things	CE404.1	2	1							1				
					CE404.2	2	1									1		
					CE404.3	3	2	1						1			1	1
					CE404.4	3	2	1							1		1	1
					CE404.5	2	1							1			1	1
					CE404.6	3	3	2	1							1	1	1
					CE404	3	2	1	1					1		1	1	1
	CE404	VII	20HS7A3	Total Quality Management	CE404.1	3	2	1	-	-	-	-	-	-	2	-	1	2
					CE404.2	3	2	1	-	-	-	-	1	-	2	-	1	2
					CE404.3	3	2	1	1	2	-	-	-	-	2	1	1	2
					CE404.4	3	2	1	2	2	-	1	-	-	2	-	1	2
					CE404.5	3	2	1	-	-	-	-	-	-	2	1	1	2
					CE404.6	3	2	1	-	1	-	-	-	-	2	1	1	2
					CE404	3	2	1	1	1		1	1		2	1	1	2
	CE405	VII	20CS7B1	C# and .Net Programming	CE405.1	2	1					1	1	1				1
					CE405.2	3	2	1				1	1	1				1
					CE405.3	3	2	1		2		1	1	1				1
					CE405.4	3	2	1		2		1	1	1				1
					CE405.5	3	2	1		2		1	1	1				1
					CE405.6	2	1					1	1	1				1
						3	2	1		1		1	1	1				1
					CE405.1	2	1					2	2	1			2	
					CE405.2	2	1					2	2	1			2	

	CE405	VII	20CS7B2	Wireless Adhoc And Sensor Networks	CE405.3	2	1						2	2	1			2	
					CE405.4	2	1						2	2	1			2	
					CE405.5	2	1						2	2	1			2	
					CE405.6	2	1						2	2	1			2	
					C	2	1						2	2	1			2	
	CE405	VII	20CS7B3	Multicore Architectures and Programming	CE405.1	2	1						1	1	1			1	1
					CE405.2	2	1						1	1	1			1	1
					CE405.3	3	2	1					1	1	1			1	1
					CE405.4	3	2	1					1	1	1			1	1
					CE405.5	3	3	2	1				1	1	1			1	1
					CE405.6	3	3	2	1				1	1	1			1	1
					C	3	2	1	1				1	1	1			1	1
	CE405	VII	20CS7B4	Distributed Systems	CE405.1	2	1						1	1	1			1	
					CE405.2	2	1						1	1	1			1	
					CE405.3	2	1						1	1	1			1	
					CE405.4	2	1						1	1	1			1	
					CE405.5	2	1						1	1	1			1	
					CE405.6	2	1						1	1	1			1	
					C	2	1						1	1	1			1	
	CE405	VII	20IT7B2	User Interface Design	CE405.1	2	1	-	-	-	-	-	1	1	-	-	-	1	2
					CE405.2	2	1	-	-	-	-	-	1	1	-	-	-	1	2
					CE405.3	3	2	1	-	-	-	-	1	1	-	-	2	1	2
					CE405.4	2	1	-	-	-	-	-	1	1	-	-	2	1	2
					CE405.5	2	1	-	-	-	-	-	1	1	-	-	2	1	2
					CE405.6	3	2	1	-	-	-	-	1	1	-	-	2	1	2
					C														
	CE405	VII	20IT7B4	Service Oriented Architecture	CE405.1	2	1	-	-	-	-	-	2	2	1	-	-	3	1
					CE405.2	2	1	-	-	-	-	-	2	2	1	-	-	3	1
					CE405.3	3	2	1	-	-	-	-	2	2	1	-	1	3	1
					CE405.4	3	2	1	-	-	-	-	2	2	1	-	1	3	1
					CE405.5	2	1	-	-	-	-	-	2	2	1	-	-	3	1
					CE405.6	3	2	1	-	-	-	-	2	2	1	-	1	3	1
					C	3	2	1	-	-	-	-	2	2	1	-	1	3	1
	CE405	VII	20HS601	Operations Research	CE405.1	3	2	1					1	1	1			1	
					CE405.2	3	2	1					1	1	1			1	
					CE405.3	3	2	1					1	1	1			1	
					CE405.4	3	2	1					1	1	1			1	
					CE405.5	3	2	1					1	1	1			1	
					CE405.6	3	2	1					1	1	1			1	
					C	3	2	1					1	1	1			1	
	C406	VII	20CS7L1	Data Analytics Laboratory	C406.1	3	2	1	-	-	-	-	2	2	2	-	2	1	2
					C406.2	3	2	1	-	-	-	-	2	2	2	-	2	1	2
					C406.3	3	2	1	-	-	-	-	2	2	2	-	2	1	2
					C406.4	3	2	1	-	-	-	-	2	2	2	-	2	1	2
					C406.5	3	2	1	-	-	-	-	2	2	2	-	2	1	2
					C406.6	3	3	2	1	1	1	-	2	2	2	2	2	1	2
					C406	3	2	1	1	1	1	-	2	2	2	1	2	1	2
					C407.1	3	2	1	-	-	3	3	3	3	3	2	2	3	3

Professional Elective IV	C407	VII	20CS7L2	Mini Project	C407.2	3	3	2	1	2	3	3	2	2	2	3	2	3	3
					C407.3	3	3	2	1	3	2	2	2	2	2	3	2	3	3
					C407.4	3	3	3	3	3	3	3	2	2	2	3	2	3	3
					C407.5	3	3	3	2	3	3	3	2	2	2	3	2	3	3
					C407.6	3	3	2	1	1	1	1	3	3	3	2	2	3	3
					C	3	3	2	2	2	3	3	3	3	3	3	2	3	3
					CE408	VIII	20CS8A1	Social Network Analysis	CE408.1	2	1						1	1	1
	CE408.2	2	1									1	1	1			2	2	
	CE408.3	3	2	1								1	1	1			2	2	
	CE408.4	3	2	1							1		1	1	1		2	2	
	CE408.5	2	1								1		1	1	1		2	2	
	CE408.6	3	2	1						1			1	1	1		2	2	
	C	3	2	1						1	1		1	1	1		2	2	
	CE408	VIII	20CS8A2	Software Defined Networks	CE408.1	2	1						1	1	1		2		
	CE408.2				2	1						1	1	1			2		
	CE408.3				2	1						1	1	1			2		
	CE408.4				3	2	1					1	1	1			2		
	CE408.5				3	2						1	1	1			2		
	CE408.6				3	2						1	1	1			2		
	C				3	2	1					1	1	1			2		
	CE408	VIII	20CS8A3	Digital Forensics and Ethical Hacking	CE408.1	2	1				3		1	1	1		2	2	
CE408.2	3				2	1			3		1	1	1		2	2	2		
CE408.3	3				2	1				3		1	1	1		2	2		
CE408.4	2				1					3		1	1	1		2	2		
CE408.5	2				1					3		1	1	1		2	2		
CE408.6	3				2	1			3	3		1	1	1	2	2	2	2	
C	3				2	1			3	3		1	1	1	1	2	2	2	
CE408	VIII	20CS8A4	Soft Computing	CE408.1	2	1	-	-	-	-	-	2	2	1	-	-	2		
CE408.2				3	2	1	-	-	-	-	2	2	1	-	1	2			
CE408.3				3	2	1	-	-	-	-	2	2	1	-	1	2			
CE408.4				2	1	-	-	-	-	-	2	2	1	-		2			
CE408.5				3	2	1	-	1	1	-	2	2	1	-	1	2			
CE408.6				3	2	1	-	1	1	-	2	2	1	2	1	2			
C				3	2	1	-	1	1	-	2	2	1	1	1	2			
CE408	VIII	20IT7B1	Cyber Physical Systems	CE408.1	2	1						1	1		-	-	1	1	
CE408.2				2	1						1	1	1		-	-	1	1	
CE408.3				2	1					1	-	-	1	1	-	-	1	1	1
CE408.4				2	1					1	-	-	1	1	1	-	1	1	1
CE408.5				2	1					1	-	-	1	1	-	-	1	1	1
CE408.6				2	1					1			1	1				1	1
C				2	1					1			1	1		1		1	1
CE408	VIII	20IT8A2	Information Security	CE408.1	2	1							2	2	2		2		
CE408.2				2	1							2	2	2		2			
CE408.3				2	1							2	2	2		2			
CE408.4				2	1							2	2	2		2	1	1	
CE408.5				2	1							2	2	2		2	1	1	
CE408.6				2	1							2	2	2		2	1	1	
C				2	1							2	2	2		2	1	1	

CE408	VIII	20EC8A3	Robotics and Automation	CE408.1	2	1					1	1			2	2			
				CE408.2	3	3	2	1		1	1		1	1	1		2	2	
				CE408.3	2	1					1	1	1	1			2	2	
				CE408.4	3	3	2	1		1	1		1	1	1		2	2	
				CE408.5	2	1					1	1	1	1			2	2	
				CE408.6	3	2	1		3	2		1	1	1	1	1	2	2	
				C	3	2	1			1	1		1	1			2	2	
CE409	VIII	20CS8B1	Information Retrieval Techniques	CE409.1	2	1					1	1			2	2	2		
				CE409.2	2	1						1	1			2	2	2	
				CE409.3	3	2	1					1	1			2	2	2	
				CE409.4	2	1						1	1			2	2	2	
				CE409.5	2	1						1	1			2	2	2	
				CE409.6	3	2	1		1			1	1			2	2	2	
				C															
CE409	VIII	20CS8B2	Green Computing	CE409.1	2	1				2	2	1	1	2		2	2	2	
				CE409.2	2	1					2	2	1	1	2		2	2	2
				CE409.3	2	1					2	2	1	1	2		2	2	2
				CE409.4	2	1					2	2	1	1	2		2	2	2
				CE409.5	2	1					2	2	1	1	2		2	2	2
				CE409.6	2	3	2	1		2	2	1	1	2		2	2	2	
				C	2	2	1	1		2	2	1	1	2		2	2	2	
CE409	VIII	20CS8B3	Virtual Reality and Augmented Reality	CE409.1	2	1	-	-	-	-	-	1	1	2	-	-	2	3	
				CE409.2	2	1	-	-	-	-	-	1	1	2	-	-	2	3	
				CE409.3	2	1	-	-	-	-	-	1	1	2	-	-	2	3	
				CE409.4	3	2	1	-	-	-	-	1	1	2	-	1	2	3	
				CE409.5	3	2	1	-	2	1	-	2	2	2	-	1	2	3	
				CE409.6	3	3	2	1	1	1	-	2	2	2	-	1	2	3	
				C	3	2	1	1	1	1	-	1	1	2	-	1	2	3	
CE409	VIII	20CS8B4	Block Chain Technology	CE409.1	2	1	-	-	-	-	-	1	1	1	-	-	2	3	
				CE409.2	2	1	-	-	-	-	-	1	1	1	-	-	2	3	
				CE409.3	2	1	-	-	-	-	-	1	1	1	-	-	2	3	
				CE409.4	3	2	1	-	1	1	-	1	1	1	-	1	2	3	
				CE409.5	3	2	1	-	1	1	-	1	1	1	-	1	2	3	
				CE409.6	2	1	-	-	-	-	-	1	1	1	-	-	2	3	
				C	3	2	1	-	1	1	-	1	1	1	-	1	2	3	
CE409	VIII	20IT8B2	Software Project Management	CE409.1	2	1						2	2	2		2	1	1	
				CE409.2	2	1							2	2	2		2	1	1
				CE409.3	3	2	1						2	2	2		2	1	1
				CE409.4	2	1							2	2	2		2	1	1
				CE409.5	2	1							2	2	2		2	1	1
				CE409.6	2	1							2	2	2		2	1	1
				C	2	1	1						2	2	2		2	1	1
CE409	VIII	20HS6A1	Intellectual Property Rights	CE409.1	2	1				1	1	2	2	2		1	1		
				CE409.2	2	1					1	1	2	2	2		1	1	
				CE409.3	2	1					1	1	2	2	2		1	1	
				CE409.4	2	1					1	1	2	2	2		1	1	
				CE409.5	2	1					1	1	2	2	2		1	1	
				CE409.6	2	1					1	1	2	2	2		1	1	

				C	2	1				1	1	2	2	2			1	1
CE409	VIII	20HS8B2	Economics for Engineers	CE409.1	2	1				1	1	2	2	2			1	1
				CE409.2	2	1				1	1	2	2	2			1	1
				CE409.3	2	1				1	1	2	2	2			1	1
				CE409.4	2	1				1	1	2	2	2			1	1
				CE409.5	2	1				1	1	2	2	2			1	1
				CE409.6	2	1				1	1	2	2	2	2		1	1
				C	2	1				1	1	2	2	2	1		1	1
C410	VIII	20CS8L1	Project Work	C410.1	3	2	1	-	-	3	3	3	3	3	2	2	3	3
				C410.2	3	3	2	1	2	3	3	2	2	2	3	2	3	3
				C410.3	3	3	2	1	3	2	2	2	2	2	3	2	3	3
				C410.4	3	3	3	3	3	3	3	2	2	2	3	2	3	3
				C410.5	3	3	3	2	3	3	3	2	2	2	3	2	3	3
				C410.6	3	3	2	1	1	1	1	3	3	3	2	2	3	3
				C410	3	3	2	2	2	3	3	3	3	3	3	2	3	3