COURSE STRUCTURE

Course Code	Course Title	Credit		Total Credit	Prerequisite
		Theory	Lab		
CSE 101, 102	Computer and Programming Concepts & Lab	3.00	1.50	4.50	
MAT 101	Differential and Integral Calculus	3.00	-	3.00	
ENG 101	English Language-I	3.00	-	3.00	
PHY 101	Physics	3.00	-	3.00	
MAT 111	Co-Ordinate Geometry and Vector Calculus	3.00	-	3.00	MAT 101
ENG 111	English Language-II	3.00	-	3.00	ENG 101
EEE 101, 102	Electrical Technology & Lab	3.00	1.50	4.50	
CSE 111, 112	Structured Programming Language & Lab	3.00	1.50	4.50	CSE 101
CSE 103	Discrete Mathematics	3.00	-	3.00	
MAT 121	Linear Algebras and Differential Equations	3.00	-	3.00	MAT 111
CSE 121, 122	Object Oriented Programming Language & Lab	3.00	1.50	4.50	CSE 111
ECO 101	Principles of Economics	2.00	-	2.00	
CSE 100	Software Development I	-	0.75	0.75	
EEE 211, 212	Electronic Devices and Circuits & Lab	3.00	1.50	4.50	EEE 101
STA 231	Statistics	3.00	-	3.00	MAT 121
CSE 213	Theory of Computing & Automata Theory	3.00	-	3.00	CSE 103
CSE 231, 232	Data Structures & Lab	3.00	1.50	4.50	CSE 121
MAT 231	Complex Variable and Furrier Analysis	3.00	-	3.00	MAT 121
CSE 205, 206	Digital Logic Design & Lab	3.00	1.50	4.50	
CSE 209	Data Communication	3.00	-	3.00	
CSE 241, 242	Algorithms & Lab	3.00	1.50	4.50	CSE 231
CSE 207, 208	Database Systems & Lab	3.00	1.50	4.50	
CSE 215	Computer Architecture	3.00	-	3.00	CSE 205
CSE 223, 224	Numerical Analysis & Lab	3.00	0.75	3.75	CSE 213
ACT 201	Accounting Fundamentals	2.00	-	2.00	
CSE 200	Software Development II	-	0.75	0.75	CSE 100
CSE 317, 318	System Analysis and Design & Lab	3.00	1.50	4.50	CSE 207
CSE 331, 332	Advanced Programming & Lab	3.00	1.50	4.50	CSE 121
CSE 315, 316	Microprocessor and Interfacing & Lab	3.00	1.50	4.50	CSE 215
CSE 309, 310	Operating Systems & Lab	3.00	1.50	4.50	
CSE 323, 324	Compiler Design & Lab	3.00	0.75	3.75	CSE 213
CSE 327, 328	Software Engineering & Lab	3.00	0.75	3.75	CSE 317
CSE 313	Mathematical Analysis for Computer Science	3.00	-	3.00	CSE 103

Course Code	Course Title	Credit		Total Credit	Prerequisite
		Theory	Lab		
CSE 351, 352	Artificial Intelligence and Expert System & Lab	3.00	1.50	4.50	CSE 241
CSE 319, 320	Computer Networks & Lab	3.00	1.50	4.50	CSE 209
CSE 341, 342	Computer Graphics & Lab	3.00	0.75	3.75	CSE 231
CSE 300	Software Development III	-	0.75	0.75	CSE 200
CSE 407	Information System Management	2.00		2.00	
CSE 425, 426	Microcontroller and Embedded Systems & Lab	3.00	1.50	4.50	CSE 315
CSE 417, 418	Distributed Database Management Systems & Lab	3.00	1.50	4.50	CSE 207
CSE 411, 412	Digital Electronics and Pulse Technique & Lab	3.00	1.50	4.50	CSE 201
CSE 400	Software Development IV	-	0.75	0.75	CSE-300
CSE 4**	Option-I (Elective)	3.00	-	3.00	
CSE 4**	Option-I (Elective)	3.00	-	3.00	
CSE 4**	Option-II (Elective)	3.00	1.50	4.50	
CSE 4**	Option-II (Elective)	3.00	1.50	4.50	
CSE 498	Project/Thesis				

Optional Courses

- Network Engineering

Option I

Course Code	Course Title	Credit		Total Credit	Prerequisite
		Theory	Lab		
CSE 431	Communication Engineering	3.00	-	3.00	
CSE 433	Fiber Optics Communication	3.00	-	3.00	
CSE 435	Network Security	3.00	-	3.00	

Option II

Course Code	Course Title	Credit		Total Credit	Prerequisite
		Theory	Lab		
CSE 437, 438	Digital Signal Processing & Lab	3.00	1.50	4.50	
CSE 439, 440	Wireless Networking & Lab	3.00	1.50	4.50	
CSE 441, 442	Switching and Routing & Lab	3.00	1.50	4.50	
CSE 443, 444	Delay Tolerant Network & Lab	3.00	1.50	4.50	
CSE 445, 446	Introduction to cryptography & Lab	3.00	1.50	4.50	
CSE 447, 448	Mobile communication & lab	3.00	1.50	4.50	
CSE 449, 450	Network Administration & Lab	3.00	1.50	4.50	

- Software Engineering

Option I

Course Code	Course Title	Credit		Total Credit	Prerequisite
		Theory	**Lab**		
CSE 451	Software Project Management	3.00	-	3.00	
CSE 453	Software Testing and Quality Assurance	3.00	-	3.00	
CSE 455	Software Security and Authentication	3.00	-	3.00	

Option II

Course Code	Course Title	Credit		Total Credit	Prerequisite
		Theory	**Lab**		
CSE 457, 458	Web Database Programming & Lab	3.00	1.50	4.50	
CSE 459, 460	Visual Programming & Lab	3.00	1.50	4.50	
CSE 461, 462	Software Architecture & Lab	3.00	1.50	4.50	
CSE 463, 464	Software Design Pattern & Lab	3.00	1.50	4.50	

- Artificial Intelligence and Expert System

Option I

Course Code	Course Title	Credit		Total Credit	Prerequisite
		Theory	**Lab**		
CSE 465	Machine Learning	3.00	-	3.00	
CSE 467	Pattern Recognition	3.00	-	3.00	

Option II

Course Code	Course Title	Credit		Total Credit	Prerequisite
		Theory	**Lab**		
CSE 477, 478	Neural Network and Fuzzy Systems & Lab	3.00	1.50	4.50	
CSE 481, 482	Decision Support System & Lab	3.00	1.50	4.50	
CSE 483, 484	Knowledge Engineering & Lab	3.00	1.50	4.50	
CSE 475, 476	Data Mining & Lab	3.00	1.50	4.50	

- Advanced Learning/Research

Option I

Course Code	Course Title	Credit Theory	Lab	Total Credit	Prerequisite
CSE 465	Machine Learning	3.00	-	3.00	
CSE 467	Pattern Recognition	3.00	-	3.00	
CSE 469	Basic Graph Theory	3.00	-	3.00	
CSE 471	Computational Geometry	3.00	-	3.00	

Option II

Course Code	Course Title	Credit Theory	Lab	Total Credit	Prerequisite
CSE 473, 474	Simulation and Modeling & Lab	3.00	1.50	4.50	
CSE 475, 476	Data Mining & Lab	3.00	1.50	4.50	
CSE 477, 478	Neural Network and Fuzzy Systems & Lab	3.00	1.50	4.50	
CSE 479, 480	VLSI Design & Lab	3.00	1.50	4.50	

- Hardware and System Engineering

Option I

Course Code	Course Title	Credit Theory	Lab	Total Credit	Prerequisite
CSE 485	Parallel Processing	3.00	-	3.00	
CSE 487	Robotics and Computer Vision	3.00	-	3.00	
CSE 489	Fault Tolerant System	3.00	-	3.00	

Option II

Course Code	Course Title	Credit Theory	Lab	Total Credit	Prerequisite
CSE 491, 492	Interfacing and Peripherals & Lab	3.00	1.50	4.50	
CSE 479, 480	VLSI Design & Lab	3.00	1.50	4.50	
CSE 493, 494	Digital System Design& Lab	3.00	1.50	4.50	