## I Year - I Semester

S. No.	Subjects	L	T	P	Credits
1-HS	English – I	4			3
2-BS	Mathematics - I	4			3
3-BS	Mathematics – II (Mathematical Methods)	4			3
4-BS	Applied Physics	4			3
5	Computer Programming	4	-		3
6-ES	Engineering Drawing	4	-		3
7-HS	English - Communication Skills Lab - 1			3	2
8-BS	Applied / Engineering Physics Lab			3	2
9-ES	Applied / Engineering Physics – Virtual Labs – Assignments			2	
10	Computer Programming Lab			3	2
	Total Credits				24

# I Year - II SEMESTER

S. No.	Subjects	L	T	P	Credits
1-HS	English – II	4			3
2-BS	Mathematics - III	4			3
3-BS	Applied Chemistry	4			3
4	Object Oriented Programming through C++	4			3
5-HS	Environmental Studies	4			3
6-ES	Engineering Mechanics	4			3
7-BS	Applied / Engineering Chemistry Laboratory			3	2
8-HS	English - Communication Skills Lab – 2	1		3	2
9	Object Oriented Programming Lab			3	2
	Total Credits				24

# II Year - I Semester

S. No.	Subjects	L	T	P	Credits
1-HS	Statistics with R Programming	4	1		3
2	Mathematical Foundations of Computer Science	4			3
3	Digital Logic Design	4			3
4	Python Programming	4	1		3
5	Data Structures through C++	4	1		3
6	Computer Graphics	4	1		3
7	Data Structures through C++Lab			3	2
8	Python Programming Lab			3	2
	Total Credits				22

## II Year - II Semester

S. No.	Subjects	L	T	P	Credits
1	Software Engineering	4		1	3
2	Java Programming	4		1	3
3	Advanced Data Structures	4			3
4	Computer Organization	4			3
5	Formal Languages and Automata Theory	4			3
6	Principles of Programming Languages	4		-	3
7	Advanced Data Structures Lab			3	2
8	Java Programming Lab			3	2
	Total Credits				22

## III Year - I Semester

S. No.	Subjects	L	T	P	Credits
1	Compiler Design	4	1	1	3
2	Unix Programming	4			3
3	Object Oriented Analysis and Design using UML	4	-1-		3
4	Database Management Systems	4	1	1	3
5	Operating Systems	4			3
6	Unified Modeling Lab		1	3	2
7	Operating System & Linux Programming Lab			3	2
8	Database Management System Lab			3	2
MC	Professional Ethics & Human Values		3		
	<b>Total Credits</b>				21

# III Year - II Semester

S. No.	Subjects	L	T	P	Credits
1	Computer Networks	4	2		3
2	Data Warehousing and Mining	4			3
3	Design and Analysis of Algorithms	4			3
4	Software Testing Methodologies	4			3
5	Open Elective:  i. Artificial Intelligence  ii. Internet of Things  iii Cyber Security  iv.Digital Signal Processing  v.Embbeded Systems  vi. Robotics	4			3
6	Network Programming Lab	1	1	3	2
7	Software Testing Lab	-		3	2
8	Data Warehousing and Mining Lab	-		3	2
9	IPR & Patents		2		
	Total Credits				21

## IV Year - I Semester

S. No.	Subjects	L	T	P	Credits
1	Cryptography and Network Security	4			3
2	Software Architecture & Design Patterns	4			3
3	Web Technologies	4			3
4- HS	Managerial Economics and Financial Analysis	4			3
5	Elective-I i. Big Data Analytics ii. Information Retrieval Systems iii. Mobile Computing	4	1		3
6	Elective-II i. Cloud Computing ii. Software Project Management iii. Scripting Languages	4	1		3
7	Software Architecture & Design Patterns Lab			3	2
8	Web Technologies Lab			3	2
	Total Credits				22

## **IV Year - II Semester**

S. No.	Subjects	L	T	P	Credits
1	Distributed Systems	4			3
2- HS	Management Science	4			3
3	Machine Learning	4			3
4	Elective-III  i.Concurrent and Parallel Programming ii.Artificial Neural Networks iii. Operations Research	4	1		3
5	Seminar	1	3		2
6	Project				10
	<b>Total Credits</b>				24