Couse Name: Bachelor of Science (B.Sc.) in Computer Science

School of Engineering & Technology

Course Structure

First Year

Semester – I

Sl. No	Course Title	L	T	P	Contact Hrs/wk	Credits
1.	COMPUTER PROGRAMMING	3	1	0	4	4
2.	COMMUNICATIVE ENGLISH	2	0	0	2	2
3.	LINEAR ALGEBRA	3	1	0	4	4
4.	COMPUTER ORGANIZATION	3	1	0	4	4
5.	COMPUTER PROGRAMMING LAB	0	0	3	3	2
6.	COMPUTER ORGANIZATION LAB	0	0	3	3	2

Semester – II

Sl. No	Course Title	L	T	P	Contact Hrs/wk	Credits
1.	DISCRETE MATHEMATICS	3	1	0	4	4
2.	PROBABILITY & STATISTICS	3	1	0	4	4
3.	ENVIRONMENTAL SCIENCE	2	0	0	2	2
4.	DATA STRUCTURES	3	1	0	4	4
5.	PROGRAMMING IN JAVA	3	1	0	4	4
6.	DATA STRUCTURES LAB	0	0	3	3	2
7.	PROGRAMMING IN JAVA LAB	0	0	3	3	2

Total Credit (First Year): 40

Second Year

Semester - III

Sl. No	Subject Name	L	T	P	Contact Hrs/week	Credits

1.	OPERATING SYSTEM	3	1	0	4	4
2.	DESIGN AND ANALYSIS OF ALGORITHM	3	1	0	4	4
3.	COMPUTER ARCHITECTURE	3	1	0	4	4
4.	WEB DESIGN AND PROGRAMMING	3	1	0	4	4
5.	OPERATING SYSTEM LAB	0	0	3	3	2
6.	DESIGN AND ANALYSIS OF ALGORITHM LAB	0	0	3	3	2
7.	WEB PROGRAMMING LAB	0	0	3	3	2

Semester - IV

Sl. No	Subject Name	L	T	P	Contact Hrs/week	Credits
1.	DATABASE MANAGEMENT SYSTEM	3	1	0	4	4
2.	SOFTWARE ENGINEERING	3	1	0	4	4
3.	COMPUTER NETWORKS	3	1	0	4	4
4.	THEORY OF COMPUTATION	3	1	0	4	4
5.	DATABASE MANAGEMENT SYSTEM LAB	0	0	3	3	2
6.	SOFTWARE ENGINEERING LAB	0	0	3	3	2
7.	COMPUTER NETWORKS LAB	0	0	3	3	2

Total Credit (Second Year): 44

Third Year

Semester - V

Sl. No	Subject Name	L	T	P	Contact Hrs/week	Credits

1.	ARTIFICIAL INTELLIGENCE	3	1	0	4	4
2.	WEB TECHNOLOGY	3	1	0	4	4
3.	ELECTIVE – I	3	0	0	3	3
4.	ELECTIVE – II	3	0	0	3	3
5.	ELECTIVE – I LAB	0	0	3	3	2
6.	ELECTIVE – II LAB	0	0	3	3	2

Semester - VI

Sl. No	Subject Name	L	T	P	Contact Hrs/week	Credits
1.	COMPUTER GRAPHICS	3	1	0	4	4
2.	ELECTIVE – III	3	0	0	3	3
3.	ELECTIVE – IV (INDUSTRY ORIENTED CERTIFICATION COURSE)	0	0	0	0	3
4.	PROJECT/DISSERTATION	0	0	12	12	8

Total Credit (Third Year): 36

Total Credits (Over three years): 40+44+36 = 120

LIST OF ELECTIVES:

ELECTIVE – I (Theory)

1. Image and Video Processing (ECS33189)
2. Cryptography & Cyber Security (ECS33191)
3. Cloud Computing (ECS33193)

ELECTIVE – I (Lab)

1. Image and Video Processing Lab (ECS33289)
2. Cryptography & Cyber Security Lab (ECS33291)
3. Cloud Computing Lab (ECS33293)

ELECTIVE – II (Theory)

1. Computer Vision (ECS33195)
2. Internet of Things (IoT) (ECS33197)
3. Machine Learning (ECS33199)

ELECTIVE – II (Lab)

1. Computer Vision Lab (ECS33295)
2. Internet of Things (IoT) Lab (ECS33297)
3. Machine Learning Lab (ECS33299)

ELECTIVE – III (Theory)

1. Computer Communication Theory (ECS33186)
2. Big Data Analytics (ECS33188)
3. Artificial Neural Network and Deep Learning (ECS33190)

ELECTIVE – IV (INDUSTRY ORIENTED CERTIFICATION COURSE)

1. Internet of Things (IOT) using Augmented Reality (AR) (ECS33192)
2. AWS / Azure Cloud Computing Course (ECS33192)
3. SAS Global Certification Course for Big Data Analytics (ECS33192)