Bachelor of Science (B.Sc.) – Computer Science

Duration: 3 Years (6 Semesters)
Eligibility: 10+2 with Mathematics / Science

Semester – I

S. No.	Subject
1	Fundamentals of Computer Science
2	Programming in C
3	Computer Organization & Architecture
4	Mathematics for Computer Science – I
5	C Programming – Practical
6	Computer Fundamentals Lab

Course Details:

This semester introduces the basics of computer systems, programming concepts using C language, and mathematical foundations required for computer science along with hands-on lab practice.

Semester – II

S. No.	Subject
1	Data Structures
2	Object Oriented Programming (C++)
3	Operating Systems
4	Mathematics for Computer Science – II
5	Data Structures – Practical
6	OOP with C++ – Practical

Course Details:

Focuses on efficient data handling techniques, object-oriented programming concepts, and operating system fundamentals with strong practical exposure.

Semester – III

S. No.	Subject
1	Database Management Systems
2	Software Engineering
3	Computer Networks – I
4	Web Programming (HTML, CSS, JavaScript)
5	DBMS – Practical
6	Web Programming – Practical

Course Details:

Covers database design, software development life cycle, networking basics, and web technologies with lab-based learning.

Semester – IV

S. No.	Subject
1	Java Programming
2	Computer Networks – II
3	Theory of Computation
4	Linux & Open Source Systems
5	Java Programming – Practical
6	Linux – Practical

Course Details:

Students learn advanced programming with Java, computational theory, networking protocols, and Linux system administration concepts.

Semester – V

S. No.	Subject
1	Python Programming
2	Artificial Intelligence
3	Cyber Security
4	Data Science Fundamentals
5	Python – Practical
6	Mini Project

Course Details:

Introduces modern technologies such as Python, AI concepts, cybersecurity principles, and data science with project-based learning.

Semester – VI

S. No.	Subject
1	Cloud Computing
2	Big Data Analytics
3	Internet of Things (IoT)
4	Major Project
5	Seminar
6	Viva Voce

Course Details:

Final semester focuses on emerging technologies and industry-oriented project work to prepare students for professional IT roles.

Scheme of Examination

- **Theory:** 70 Marks
- **Practical / Project:** 30 Marks