



School Syllabus for WBCHSE

Duration: 300 Hrs.

Course Highlights:

Class-XI

Semester I

1. Computer System and Organisation
 - Basic Computer Organisation
 - Concepts of Software
 - Number System
 - Boolean Algebra
2. Programming Fundamentals
 - Concept of Programming
 - Algorithm fundamentals
 - Introduction to Problem Solving
3. Data Visualization using Spreadsheet
 - Introduction to Spreadsheets
 - Working with Data and Tables
 - Performing Calculations on Data
 - Changing Workbook Appearance
 - Data Analysis and Manipulation
 - Reporting and Presentation of Results
 - Collaboration and Sharing

Semester II

1. Data Structure
 - Definition, types of data structure-linear and non-linear
 - Arrays: 1D, 2D and their applications
 - Stack, Queue, Recursion, Searching and Sorting
2. Computer Networks
 - Introduction to Networking
 - Transmission Media
 - Network Connecting Devices
 - Network Type and Topologies



- Network Protocols
- Introduction to Web Services
- HTML

3. Ethics

- Digital Footprints
- Data Protection
- Cyber Crime
- Cyber safety
- Malware
- E-waste management

Class-XII SEMESTER – III

1. Python Programming

- Familiarization with the basics of Python programming
- Knowledge of data types
- Operators
- Expressions, statement, type conversion, and input/output
- Errors
- Flow of Control
- Conditional statements
- Iterative Statement
- Strings
- Lists
- Introduction to Python modules
- Functions

2. E-Commerce

- An introduction to Electronic Commerce
- Electronic Payment System
- Internet Marketing

SEMESTER – IV

1. Database Management System



- Introduction
 - Entity Relationship (ER) Modelling
 - Relational Model
 - Integrity Constraints
 - SQL
2. Data Warehousing and Data Mining
- Introduction
 - Data Mining Applications and Trends
3. Foundation of Artificial Intelligence (AI)
- Introduction to Artificial Intelligence
 - AI Subfields and Technologies
 - Applications of AI
 - Ethical and Social Implications of AI

Project

Edge : Extra practice sessions and Mock-Test will be conducted after completion of the syllabus

Exit Profile: Future ready Information Technology / Computer Science Engineer.

Certification : Certificate will be provided after completion of the course & clearing exams.

Course Objective :

This Instructor-led Application Program provides a complete understanding of topics as per board Syllabus. School students will learn the importance of programming concepts to become future ready.