

# COMPUTER SYLLABUS

## Class – 6

### 6<sup>th</sup> Class Computer Syllabus – An Overview

For Class 6, the NCERT Computer Science syllabus expands on earlier concepts and introduces more sophisticated topics. Here's a detailed breakdown of the topics and sub-topics typically covered:

#### Here our chapters for ITSE Examination :-

**Chapter – 1 ( *Introduction to Computers* )**

**Chapter – 2 ( *Computer Hardware* )**

**Chapter – 3 ( *Software and Operating Systems* )**

**Chapter – 4 ( *Using Word Processors* )**

**Chapter - 5 ( *Presentation Software* )**

**Chapter - 6 ( *Spreadsheets and Data Handling* )**

**Chapter – 7 ( *Internet and Web Technologies* )**

**Chapter – 8 ( *Introduction to Multimedia* )**

**Chapter - 9 ( *Basics of Coding and Programming* )**

**Chapter - 10 ( *Ethical and Responsible use of Technology* )**

**Chapter - 11 ( *Practical Applications and Projects* )**

# Chapter – 1 ( Introduction to Computers )

## Topics and Sub – Topics :-

- **Understanding Computers**
  - Definition and importance of computers in various fields.
  - Evolution and history of computers.
- **Types of Computers**
  - Categories based on size and function: Supercomputers, Mainframes, Desktops, Laptops, Tablets.
  - Introduction to modern devices like Smartphones and IoT devices.

# Chapter – 2 ( Computer Hardware )

## Topics and Sub – Topics :-

- **Detailed Study of Hardware Components**
  - Internal parts: CPU, Memory (RAM, ROM), Storage (HDD, SSD).
  - External devices: Input devices (Keyboard, Mouse, Scanner), Output devices (Monitor, Printer, Speakers).
- **Storage Devices**
  - Types of storage: Hard Disk, SSD, USB Flash Drives, CD/DVD, Cloud Storage.
  - Understanding how data is stored and accessed.

# Chapter – 3 ( Software and Operating Systems )

## Topics and Sub – Topics :-

- **Types of Software**

- System Software: Operating Systems (Windows, macOS, Linux).
- Application Software: Word Processors, Spreadsheets, Graphics Software.
- **Functions of an Operating System**
  - Managing hardware and software resources.
  - User interface and file management.

## Chapter – 4 ( Using Word Processors )

### Topics and Sub – Topics :-

- **Advanced Word Processing**
  - Creating and formatting documents: Text alignment, styles, and themes.
  - Inserting and formatting images, tables, and charts.
- **Document Collaboration**
  - Track changes and comments.
  - Sharing documents for collaborative editing.

## Chapter - 5 ( Presentation Software )

### Topics and Sub – Topics :-

- **Creating Effective Presentations**
  - Designing slides with text, images, and multimedia.
  - Using transitions and animations.
- **Delivering Presentations**
  - Tips for effective presentation delivery.
  - Reviewing and printing slides.

## Chapter - 6 ( Spreadsheets and Data Handling )

### Topics and Sub – Topics :-

- **Basics of Spreadsheets**
  - Introduction to cells, rows, columns, and worksheets.
  - Entering and formatting data.

- **Formulas and Functions**

- Using basic mathematical and logical formulas.
- Applying functions for data analysis (SUM, AVERAGE, COUNT).

- **Data Visualization**

- Creating and customizing charts and graphs.
- Using conditional formatting to highlight data.

## **Chapter – 7 ( Internet and Web Technologies )**

### **Topics and Sub – Topics :-**

- **Understanding the Internet**

- Basic concepts of how the internet works.
- Introduction to web browsers and search engines.

- **Online Communication**

- Using email and instant messaging.
- Basics of video conferencing and online meetings.

- **Internet Safety**

- Recognizing and avoiding online threats (malware, phishing).
- Safe browsing and secure online practices.

## **Chapter – 8 ( Introduction to Multimedia )**

### **Topics and Sub – Topics :-**

- **Elements of Multimedia**

- Understanding text, graphics, audio, video, and animation.
- Examples of multimedia applications in education and entertainment.

- **Creating Multimedia Projects**

- Using software to create simple multimedia presentations.
- Combining different media elements effectively.

## Chapter - 9 ( Basics of Coding & Programming )

### Topics and Sub – Topics :-

- **Introduction to Programming**
  - Understanding programming concepts and algorithms.
  - Introduction to programming languages (Scratch, Python basics).
- **Block-based Programming**
  - Creating simple programs using block-based tools like Scratch.
  - Basic concepts: loops, conditionals, variables.
- **Text-based Programming**
  - Introduction to basic syntax and commands in text-based languages.
  - Writing simple scripts and programs.

## Chapter - 10 ( Ethical & Responsible use of Technology )

### Topics and Sub – Topics :-

- **Digital Citizenship**
  - Understanding digital rights and responsibilities.
  - Respecting digital property and avoiding plagiarism.
- **Cyber Ethics**
  - Ethical behavior in online environments.
  - Importance of strong passwords and protecting personal information.

## Chapter - 11 ( Practical Applications & Projects )

### Topics and Sub – Topics :-

- **Integrated Projects**
  - Applying knowledge from different topics to create comprehensive projects.
  - Examples: Creating a newsletter, designing a website, developing a simple game.

- **Hands-on Activities**

- Practical exercises to reinforce learning.
- Group projects to enhance teamwork and collaboration skills.

