

## Computer Curriculum 2024-2025

### **Aims of Curriculum**

1. Develop knowledge and understanding of the range and organization of computer systems, and the interrelationships between hardware, software and data.
2. develop students into competent, effective, discriminating, ethical and confident users of ICT, so as to support their lifelong learning.
3. Use a range of applications software effectively, ethically and with discrimination to support information processing and problem-solving.
4. Demonstrate an understanding of methods for analyzing problems, and planning and implementing solutions using ICT.
5. Equip students with problem-solving and communication skills, and encourage them to think critically and creatively.

### **Curriculum Plan**

<b>S.1</b>		
<b>Topics to be covered</b>	<b><i>Technology Learning Elements</i></b>	<b>Term</b>
Computer System	<i>Computer Systems</i>	First Term
File Management	<i>Information Processing &amp; Presentation</i>	
Computer Ethics	<i>National Security &amp; Value Education</i>	
Logo Programming	<i>Programming Concepts</i>	
Word Processing	<i>Information Processing &amp; Presentation</i>	
Quick Input Method	<i>Information Processing &amp; Presentation</i>	Second Term
Use of PhotoShop	<i>Information Processing &amp; Presentation</i>	
Swift Playground	<i>Programming Concepts</i>	

<b>S.2</b>		
<b>Topics to be covered</b>	<b>Technology Learning Elements</b>	<b>Term</b>
Basic components of a computer system	<i>Computer Systems</i>	First Term
Storage Units	<i>Computer Systems</i>	
Software	<i>Computer Systems</i>	
Programming Languages	<i>Programming Concepts</i>	
Spreadsheet	<i>Information Processing &amp; Presentation</i>	
Computer Ethics	<i>National Security &amp; Value Education</i>	
Introduction to HTML	<i>Information Processing &amp; Presentation</i>	Second Term
Webpage Authoring with Dreamweaver	<i>Information Processing &amp; Presentation</i>	
Game Programming with Scratch	<i>Programming Concepts</i>	

<b>S.3</b>		
<b>Topics to be covered</b>	<b>Technology Learning Elements</b>	<b>Term</b>
Audio Editing	<i>Computer Systems</i>	First Term
Video Editing	<i>Information Processing &amp; Presentation</i>	
Introduction to AI with Computer Ethics (AI related)	<i>Artificial Intelligence, National Security &amp; Value Education</i>	
Python Programming + Programming Concept	<i>Programming Concepts</i>	Second Term
Introduction to AI with Computer Ethics (AI related)	<i>Artificial Intelligence, National Security &amp; Value Education</i>	
Micro-bit	<i>Systems &amp; Control</i>	

<b>S.4 (New Syllabus 2025)</b>	
<b>Topics to be covered</b>	<b>Term</b>
Introduction to Information Processing	First Term
Data Organization and Data Control	
Data Representation	
Relational Databases	
SQL statements (1)	Second Term
Computational Thinking & Programming (D1)	
Computer System Fundamentals	

<b>S.5 (New Syllabus 2025)</b>	
<b>Topics to be covered</b>	<b>Term</b>
Computer System Fundamentals	First Term
Computational Thinking & Programming (D2)	
Algorithm and Programming (Elective C)	
Database Design	Second Term
SQL statements (2)	
Internet and its Applications (C1)	
Internet and its Applications (C2)	

<b>S.6 (New Syllabus 2025)</b>	
<b>Topics to be covered</b>	<b>Term</b>
Internet and its Applications (C2)	First Term
Technological Innovations	
Health and Ethical Issues	
Intellectual Property	