

YEAR 7

COMPUTING



SRI KDU
International
School
SUBANG JAYA

PROGRAMME OF STUDY - TERM 1

TERM 1.1 USING COMPUTERS SAFELY, EFFECTIVELY AND RESPONSIBLY

- **File Management and Security**

- Understand File Organization: Learn the importance of organizing files systematically.
- Implement Secure File Management: Practice techniques to protect data and personal information.

- **E-safety**

- Address Cyber-Bullying: Recognize, prevent, and respond to online harassment.
- Understand Phishing: Identify and avoid fraudulent attempts to obtain sensitive information.
- Manage Online Profiles: Maintain privacy and manage personal information on social media.

- **Functionality and Operation of Email**

- Understand Email Systems: Learn how email works.
- Use Email Effectively: Develop skills for effective email communication.
- Practice Email Etiquette: Learn best practices for professional and personal email use.

- **Using Search Engines**

- Understand Search Engines: Learn how search engines function.
- Develop Search Strategies: Find reliable information using effective search techniques.
- Evaluate Online Sources: Assess the credibility of information found online.

TERM 1.2 UNDERSTANDING COMPUTERS

- **Computer Architecture and Binary**

- Revise Input and Output: Review previous learning on input and output devices.
- Understand Input-Process-Output: Explore the sequence through practical activities.
- Learn Fetch-Decode-Execute Cycle: Understand the cycle in computer processing.

- **Binary to Decimal Conversion**

- Perform Conversions: Convert binary numbers to decimal and vice versa.
- Represent Text with ASCII: Learn how text characters are represented using the ASCII code.

- **Binary Addition**

- Perform Simple Binary Addition: Carry out basic binary arithmetic operations.

- **Data Representation in Storage Devices**

- Explore Data Storage: Understand how storage devices represent data using binary patterns.

- **History and Development of Technology**

- Study Historical Developments: Learn about the history and evolution of communication and technology.
- Discuss Applications: Explore various applications of communication and technology.

ONGOING OBJECTIVES

(COMPUTING NATIONAL CURRICULUM)

- Computational Abstractions
 - Model real-world problems using computational abstractions, such as file management and security systems.
- Algorithms and Logical Reasoning
 - Understand and apply key algorithms and logical reasoning for secure data management and e-safety practices.
- Boolean Logic and Binary Operations
 - Utilize Boolean logic (AND, OR, NOT) in understanding email functionality and online security.
 - Perform binary operations including binary addition and conversion between binary and decimal.
- Computer Systems
 - Understand hardware and software components and their communication within computer systems.
- Instruction Execution and Data Representation
 - Learn how instructions are stored and executed, and represent data digitally (text, sound, images) in binary form.
- Digital Projects and Artefacts
 - Undertake projects that combine multiple applications to collect and analyze data, creating and revising digital artefacts.
- Safe and Responsible Technology Use
 - Use technology safely and responsibly, protecting online identity, managing online profiles, and understanding phishing.