

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.