

YEAR 8

COMPUTING



SRI KDU
International
School
SUBANG JAYA

PROGRAMME OF STUDY - TERM 1

TERM 1.1 COMPUTER CRIME AND CYBER SECURITY CTIVELY AND RESPONSIBLY

- Computer Misuse Act
 - Overview of the Act: Understand the key provisions and implications for computer use.
 - Implications: Discuss the consequences of violating the Act.
- Data Protection Act
 - Overview of the Act: Learn the main principles of data protection.
 - Compliance: Understand how to comply with data protection laws.
- Copyright Law
 - Overview of Copyright: Learn the basics of copyright law and its importance.
 - Implications: Discuss the impact of copyright infringement.
- Phishing and Email Fraud
 - Identify Phishing Scams: Recognize different types of phishing and email fraud.
 - Prevention: Learn ways to protect oneself from phishing and fraud.
- Hacking and Data Harvesting
 - Understand Hacking: Discuss the methods and implications of hacking.
 - Data Harvesting: Learn about data harvesting and identity theft.
 - Protection: Explore ways to safeguard online identity and privacy.
- Health and Safety Law
 - Overview of Health and Safety: Understand the legal requirements for safe computer use.
 - Environmental Issues: Discuss safe disposal of old computers and environmental concerns.
- Non-e-Safety
 - Broader Safety Concerns: Address safety issues beyond e-safety, including physical and environmental safety.

TERM 1.2 INTRODUCTION TO PYTHON

- Understanding Python
 - Introduction to Python: Familiarize with the basic syntax and structure of Python.
 - Develop Programs: Understand the process of developing simple programs.
- Writing Correct Syntax
 - Correct Syntax: Emphasize the importance of writing error-free code.

- Algorithm Formulation
 - Formulate Algorithms: Create algorithms for simple programs.
 - Problem Solving: Develop problem-solving skills through algorithm design.
- Control Structures
 - If Statements: Learn to use If statements for decision-making.
 - While Loops: Understand and implement While loops for repeated actions.
- Concepts in Programming
 - Validation: Apply validation techniques to ensure correct data entry.
 - Searching: Learn basic searching algorithms within a program.
- Debugging
 - Debugging Programs: Develop skills to identify and fix errors in programs.

ONGOING OBJECTIVES

(COMPUTING NATIONAL CURRICULUM)

- Computational Abstractions
 - Apply knowledge from the Computer Misuse Act, Data Protection Act, and Copyright Law to real-world scenarios.
 - Develop and debug Python programs to solve problems.
- Key Algorithms and Computational Thinking
 - Discuss and implement security measures and basic algorithms in Python.
- Multiple Programming Languages
 - Use Python to solve problems, incorporating data structures and modular programming.
- Data Representation
 - Represent and manipulate data digitally using Python programs.
- Creative Projects
 - Undertake Python programming projects, creating a portfolio demonstrating skills.
- Safe Technology Use
 - Use technology responsibly, protecting online identity and privacy in line with legal guidelines.