SIR WILLIAM ROBERTSON ACADEMY

SUBJECT CURRICULUM MAP

Year 11

ETHICAL & LEGAL
- Ethical Issues
- Legal Issues
- Cultural Issues
- Environmental Issues
- Open-Source Vs Proprietary Software

SYSTEM SOFTWARE
- Operating Systems
- Utility System

PYTHON
- Using Iteration
- Handling User Input
- Using Data Structures
- Working With Files

REVISION

REVISION & EXAMS

PYTHON
- Structured Programming
- Using Selection
- Using Number Data Type
- Using String Data Type

NETWORK SECURITY
- Forms of Attack
- Identifying & Preventing Vulnerabilities

NETWORK PROTOCALS
- Types of Networds
- Network Architecture
- Network Topology
- LANs & WANs

DATA STORAGE
- Units of Data
- Binary/Base 2
- Binary Addition
- Binary Shifting
- Denary Conversion
- Hexadecimal
- Hex Conversion

MEMORY & STORAGE
- Primary Memory
- Virtual Memory
- Types of Storage
- HDD
- SDD
- Optical

Year 10

SELECTION
- If Statements
- elif,else
- Nested Conditions
- Boolean Logic

DATA TYPES
- Integer
- Float
- String
- Casting
- Sound

SORTING ALGORITHS
- Bubble Sort
- Bucket Sort

SEARCHING ALGORITHS
- Linear Search
- Binary Search

ADVANCED PYTHON
- Data Structures
- Lists
- Iteration
- Subroutines

Project Evaluation & Feedback

SYSTEM ARCHITECTURE
- Von Neuman Architecture
- Architecture of the CPU
- CPU Performance

Year 9

INTRO TO PROGRAMMING
- IDE
- High Level Languages
- Syntax

APP LAB
- App Design
- Block Coding
- Abstraction
- Decompotition

EDUBOOKS
- Reciew Selection
- Review Variable Iteration

DIGITAL PRESENTATION
- PPT Design
- Presentation Slkills
- Technology

IMPACT OF TECHNOLOGY
- Impact on Society
- Impact on the Environment

Project Evaluation & Feedback

BINARY
- Denary
- Binary
- Place Value
- Converting
- Binary Addition

Year 8

ONLINE SAFETY
- Who are you talking to?
- Cyberbullying
- Using PPT

Flowcharts
- Why use Flowcharts
- Flowchart Symbols
- Using an Algorithm to Create a Flowchart

SCRATCH
- Intriductions to Programming
- Sequence
- Variable
- Selection

INSIDE A COMPUTER
- Bãsic Function
- General Purpose
- Hardward Vs Software

Project Evaluation & Feedback

BINARY
- Denary
- Binary
- Applications
- Converting

IMAGE REPRESENTATION
- Bitmap Images
- Pixels
- Resolution
- Colour Depth
- Bit Depth

USING COMPUTERS
- Impact of Technology
- Accessing Email
- Folder Structures
- Browsers & Applications

Year 7

Further Study
BSC Computer Science, BSC Information Systems Management

Career Paths
Games Developer, Software Engineer, Database Administrator

Skills
Computational & Algorithmi Thinking

Interest
A continued passion and love of learning about technology and how it work