

I. T. E. BLAISE PASCAL - FOGGIA

Amministrazione Finanza e Marketing – Sistemi Informativi Aziendali
Informatica e Telecomunicazioni

Programma Svolto

Classe 2^aC - AFM(Cambridge)

Anno Scolastico: 2021/2022

Disciplina: Informatica (Computer science)

Docente: Cavaliere Luisa

Libri di testo: Lawrey Sarah, Scott Donald - Cambridge IGCSE® Computer Science Coursebook - Cambridge University Press
Chris Roffey - Cambridge IGCSE™ and O Level Computer Science Programming Book for Python - Cambridge University Press

Syllabus: Syllabus Cambridge IGCSE™ Computer Science 0478-2023-24-25

- Hardware

- Computer architecture
 - Fetch–decode–execute cycle: Little Man Computer
 - Factors that can affect the performance of a CPU
- Input/Output devices (no sensors)
- Data storage
 - Primary storage
 - Secondary storage
 - Magnetic, optical, solid-state and off-line storages
 - Choosing an appropriate secondary storage device
 - Calculating the storage requirement of a file
 - Virtual memory and Cloud storage

- Boolean logic

- The role of logic gates
- The NOT, AND, OR, NAND, NOR, XOR logic gates
- Logic expressions
- Representing truth tables and logic expressions

- Data Representation
 - Binary manipulation and negative numbers
- Algorithm design and problem-solving
 - Program development life cycle: analysis, design, coding and testing
 - Design tools: flowcharts and pseudocode
 - Variables and constants
 - Types of data
 - Naming conventions
 - Arithmetic operators
 - Selection
 - If statement
 - Logical operators
 - Multiple if statement
- Laboratory activities
 - Programming: Python
 - Getting Python 3.7 and IDLE
 - Getting Wing Python IDE
 - Programming tasks
 - Logisim: educational tool
 - Designing and simulating digital logic circuits
- Cisco Course - Introduction to Cybersecurity
- Educazione civica
 - Essere cittadini digitali
 - Comunicare e informarsi attraverso la rete
 - Veridicità e validità dei contenuti
 - Usare la rete in modo sicuro

Foggia, 30 maggio 2022

Gli alunni

La docente

do Fredo Tolanda

Maria Antonia Ricci

Lucrezia