

# I. T. E. BLAISE PASCAL - FOGGIA

Amministrazione Finanza e Marketing – Sistemi Informativi Aziendali  
Informatica e Telecomunicazioni

## Programma Svolto

### Classe 1<sup>a</sup>C - AFM (Cambridge)

Anno Scolastico: 2021/2022

Disciplina: Informatica (Computer science)

Docente: Cavaliere Luisa

Libro di testo: Sarah Lawrey, Victoria Ellis - Cambridge IGCSE™ and O Level Computer Science Coursebook - Cambridge University Press

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

- Data Representation
  - Binary and hexadecimal number system
  - Binary manipulation and negative numbers
  - How do computers represent text, images and sound?
  - Measuring data storage
- Hardware
  - Von Neumann architecture
  - The role of the CPU
  - The fetch, decode and execute cycle
  - Factors that can affect the performance of a CPU
  - Data storage: RAM and ROM
- Boolean logic
  - The role of logic gates
  - The NOT, AND, OR, NAND, NOR, XOR logic gates
  - Logic expressions
  - Representing truth tables and logic expressions
- Algorithm design and problem solving
  - Program development life cycle
  - Analysis
  - Pseudocode
  - Coding in Python
  - Testing

- Programming
  - Variables and constants
  - Numeric data types
  - Input/Output statements
  - Assignment
  - Sequence
- Laboratory activities
  - Spreadsheet: Excel
    - First operations
    - Change the format
    - Formulas and functions
    - Relative and absolute references
    - IF function
    - Charts
  - Logisim: educational tool
    - Designing and simulating digital logic circuits
  - Programming: Python
    - Simple problems
- Cisco Course – Get Connected
- Educazione civica
  - Essere cittadini digitali
  - Comunicare e informarsi attraverso la rete

Foggia, 28 maggio 2022

Gli alunni

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La docente

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