

Riferimento: libro di testo *Career Paths in Technology* (ed. LANG)

MODULE 1: COMPUTER HARDWARE (Unit 11)

- Types of computer;
- The four basic functions of the computer system: input, processing, output and storage;
- Input-output devices;
- Computer storage (ROM and RAM) and main methods of storage;
- Making passwords secure and basics of biometric authentication.

MODULE 2: COMPUTER SOFTWARE AND PROGRAMMING (Unit 12)

- The operating system;
- The software release life cycle (alpha and beta testing);
- Low-level and high-level computer languages;
- Programming languages (*attività svolta in forma di ricerca e relativa esposizione di gruppo, con approfondimento di un linguaggio a scelta fra quelli esistenti*).

MODULE 3: APPLICATIONS (Unit 13)

- Where computers are used: main fields of application;
- The spreadsheet, charts and graphs;
- The database and DBMS (*Database Management System*);
- Computer graphics: raster and vector images.

MODULE 4: COMPUTER NETWORKS (Unit 14)*

***Sono stati condivisi con la classe contributi dal volume *Bit by Bit* (ed. Edisco)**

- Linking computers and network components;
- Network scale and topologies;
- Ways of communication: circuit switching and packet switching;
- Ways of connecting to the Internet.

MODULO TRASVERSALE DI EDUCAZIONE CIVICA

- Cancel culture and censorship and their impact on today's society.

MODULE 5: THE WEB (Unit 15)

- Web apps;
- The language of the Web;
- The evolution of the Web: from Web 1.0 to Web 4.0;
- E-commerce and the cashless society;
- Web accessibility.

Viareggio, 28/05/2025

Il docente

Tiziano Lavorini
