



ISTITUTO DI ISTRUZIONE SUPERIORE

Michele Giua

Cagliari

ANNO SCOLASTICO 2024/2025

PROGRAMMA SVOLTO

Classe: 5^a H- Ist. Tecn. Art. Informatica - Cagliari

Materia: Lingua straniera (Inglese)

Docente: Alessandra Pani

Libro di testo: *Bit by Bit, English for Information and Communications Technology (New Edition)*, Doretta Ardu, Roy Palmer, ed. Edisco, vol. unico

Module 5.1: Communication Networks

- Telecommunications
- Methods of transmission
- Short-region wireless and mobile transmission
- Networks
- Types of networks
- Network topologies
- Communication protocols: the ISO/OSI model
- Communication protocols: TCP/IP

Module 5.2: The Internet

- The Internet and its services
- The World Wide Web, websites and web browsers
- Search engines and web search
- Content aggregators
- Cloud computing

Module 4.1: Main software

- Databases
- Database application

Module 5.3: Sharing online

- Social networks
- Blogs and online forums
- Audio, video and image sharing
- Collaborative documents and wikis
- Smart TV and streaming
- VoIP and videoconferencing
- Instant messaging and microblogging
- Apps and widgets

- Smartwork

Module 6.1: Computer threats

- Malware, adware, spam and bugs
- Viruses, worms, backdoors and rogue security
- Crimeware
- Mobile malware
- Network threats

Module 6.2: Computer protection

- Cryptography
- Protection against risks
- Best practices to protect your computer and data
- Network security, copyright and copyleft

Module 6.3: Protecting yourself and your data

- Big data
- Customer profiling
- GDPR and privacy regulations

Educazione civica: the contribution of women to Computer Science (Ada Lovelace, Dame Vera Shirley, Katherine Johnson, Margaret Hamilton, Brenda Laurel)

Cagliari, 22 giugno 2025

La docente

Alessandra Iru