

PROGRAMMA DI LINGUA INGLESE

CLASSE 5[^] indirizzo mecatronico

Testo in adozione : B.Franchi Martelli – H.Creek "English Tools for Mechanics" Ed. Minerva Scuola

- **Section 1: introducing the world of engineering**
 - UNIT 1: First steps into the world of engineering
 - Engineers at work
 - Technical communication
 - Designing, drawing, manufacturing
 - UNIT 2: Materials
 - Atoms and elements
 - Characteristics of materials
 - Composite and smart materials
 - UNIT 3: Drawing
 - How to represent a design
- **Section 2: safety in your machine shop**
 - UNIT 4: Working safely
 - Hazard prevention
 - Electrical safety
 - UNIT 5: Electricity
 - Electrical safety rules
 - Conductors, insulators, semiconductors
 - UNIT 6: Risk assessment
 - Identifying dangers
 - Risks under control
- **Section 3: tools and machine tools**
 - UNIT 7: Entering a machine shop
 - Bench fitting
 - Tools and processes
 - UNIT 8: Machine tools
 - Machine tool operations
 - Lathes
 - Holemaking
 - Milling and grinding machines
 - UNIT 9: Computer and machine
 - Automation technology
 - Computer in the machine shop
- **Section 4: computers and automation**
 - UNIT 12: Automation and robotics
 - The basics of robotics
 - New technology in engineering
 - Robots at work
- **Section 5: energy, engines and mechanical engineering system**
 - UNIT 13: Energy
 - Energy and environment : Sources of energy
 - Alternative sources of energy
 - An open debate on nuclear energy : text 13 and 16
 - UNIT 15: Engines and car technology
 - Car engines : How car engines work
 - Green cars