



Istituto di Istruzione Superiore “D. Scano – O. Bacaredda” - Cagliari

Settore Tecnologico, Indirizzi: Meccanica, Meccatronica e Energia – Informatica e Telecomunicazioni

Trasporti e Logistica (*Costruzione del mezzo Aereo – Conduzione del mezzo Aereo*) – **Costruzioni, Ambiente e Territorio** (*CAT – Tecnologia del Legno nelle Costruzioni*)

Cod.Fisc. 92259010921 - **Cod.Univoco** 4A26IA

Anno scolastico: 2025/2026

Programma didattico lingua inglese - 5C ME

I livelli linguistici per il quinto anno sono relativi al quadro comune di riferimento europeo: B1-B1+ B2. I contenuti, suddivisi in due parti come “inglese generale” e “inglese professionale”, sono riferiti a strutture, funzioni e contenuti propri dei due libri di testo.

Inglese generale.

Libro di testo: Elisabeth Sharman, *Identity B1 to B1+*, Oxford.

Unit 9 Do the right thing!

Competences. Talk about crime, talk about historical events, check or confirm information.

Vocabulary. Crimes and criminals, the justice system.

Grammar. Past perfect, question tags. Intonation in question tags.

Culture (focus on listening skills): Freedom fighters: breaking the law to change the world?

Communication (focus on speaking skills). Reporting a theft.

Trending topics (focus on reading and writing skills). A courtroom where the judges are teenagers.

Unit 10 On the money!

Competences. Talk about money and spending, talk about news and events, use verb patterns.

Vocabulary. Money: nouns. Spending. Money: verbs

Grammar: Passive: present perfect, present continuous, will, uses of the -ing form, uses of the infinitive.

Culture (focus on listening skills). Who's on your banknotes?

Communication (focus on speaking skills). A job interview.

Trending topics. Crowdfunding: a way to turn dreams into reality?

Unit 11 Our digital lives

Competences. Talk about technology. Talk about imaginary past situations. Talk about regrets and past mistakes.

Vocabulary. Technology: nouns, verbs and phrases. Social media.

Grammar. Third conditional. Wish+ past perfect. Should have and shouldn't have.

Culture (focus on listening skills). Tech visionaries and innovators.

Communication (focus on speaking skills). Apologising (*I'm really sorry, don't worry, etc.*)

Unit 12 Media matters

Competences. Talk about advertising. Report statement. Report questions and Commands.

Vocabulary. Advertising Media

Grammar. Reported statements. Reported speech: other changes.

Inglese professionale.

Libro di testo: Michela Di Rocchi, Cinzia Ferrari, *I mech. English for Mechanical Technology*, Hoepli.

What is mechatronics?

Mechanics.

Unit 5 Engines

Engines: the basics.

The four-stroke cycle.

The Diesel engine.

The engine systems.

Electrical Engineering.

Unit 7 Electricity: basic principles

Electric circuits;

Static electricity: the triboelectric effect.

Electric motors.

A simple motor diagram.

Series and parallel circuits: application of First Ohm's law.

Ohm's law triangle. Voltage, current and resistance formula.

Unit 8 Energy sources

What is energy?

Renewable sources of energy.

Non-renewable sources of energy.

Electronics and control systems.

Unit 9 Automation

Automation: the basics.

Industrial automation.

Unit 10 Control System

How automation works.

PLC: the basics.

Sensors and actuators.

Unit 11 Robotics

Robotics: the basics.

Industrial robot. Robot configurations.

The robotic arm.

Unit 12 Industry 4.0

Industry 4.0 and IOT: the basics.

Jobs and skills of the future.
Industry 4.0 in Italy and abroad.

Lecture e video aggiuntivi.

Michio Kaku, *Physics of the Future. The Inventions that will Transform our Lives*, Penguin Books.

Video “How does an electric motor work?”

Video “The Greenhouse Effect.”

Educazione civica

Agenda 2030. Goal 16: Promote just, peaceful and inclusive societies.

Monserrato, 13/06/2025.

Il docente

Prof. Giuseppe Pusceddu