



Istituto Tecnico Industriale Statale “Q. Sella”
13900 BIELLA



Anno Scolastico 2024/2025

CLASSE V sez. A Indirizzo Meccanica e Meccatronica

DISCIPLINA	LINGUA INGLESE
DOCENTE	GRAZIA SEMPREVIVO
TESTO/I ADOTTATO/I	“IT WORKS” – EDISCO ed.

Biella, 05.05.2025

L'insegnante:

Grazia Semprevivo



PROGRAMMAZIONE DI DIPARTIMENTO

MODULE 1 – CULTURAL MATTERS (appunti forniti dalla docente)

American Voting System
BREXIT
The British system
The English Parliament
The European Election
The Industrial Revolution
The Victorian Age
Great Changes
The First World War
The 1929 Crisis and the second World War
Today's world
Henry Ford and the Model T
History of Automation

MODULE 2 – MACHINE TOOLS

CNC and Traditional Machine tools
Milling machine tools
Drilling machine tools
Grinding machine tools
The Lathe
550 High – Tech lathe
3D Printing

Health and safety
Safety rules and signs
In Case of emergency
Working in a lab
Privacy and online data protection.

MODULE 3 – AUTOMATION

Automation
Automation system components
Sensors
Different types of Sensors
PLC
Mechatronics
Industrial Robotics
How does a robot work?
Robots in manufacturing

MODULE 4 – ENGINES

External and Internal combustion engines



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Four stroke engines
Two stroke engines
The Diesel Engine
Engine Innovation



PROGRAMMA SVOLTO

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Properties of materials: mechanical, thermal, electrical properties
Metals: ferrous and non-ferrous metals
Plastics: thermosetting and thermoplastics materials
Rubber
Composite Materials

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METODI UTILIZZATI

Lezioni Frontali

Lezioni Interattive (brainstorming using *mentimeter*, *quizizz*)

Cooperative Learning

Peer – to – peer learning

MEZZI E STRUMENTI

Libro di testo

Appunti forniti dalla docente

Youtube

VERIFICHE

Listening tests

Verifiche orali

Verifiche scritte (*open questions*, *T/F exercises*, *fill the gaps*, *multiple choices*)

Reading Comprehension tests