

Istituto di Istruzione Superiore 'Scano'
 Sede di Monserrato
 anno scolastico 2022-2023
 indirizzo: Trasporti e logistica
 articolazione: Costruzione del mezzo aereo
 classe 5B TL
 materia: inglese
 insegnante: Anna Maria Murtas
p r o g r a m m a

CONTENUTI

General English	Grammar	verbs: past perfect verbs: passive form of present continuous, present perfect, modals verbs: infinitive, ING-form question tags
	Vocabulary	crime and justice money
	Functions	checking information reporting a crime cv job interview
English in Aeronautics	Airframe	wings: function cantilever wings, wings supported by struts low wings, mid wings, high wings straight wings, swept wings, delta wings structure (spars, ribs, skin) movable parts (ailerons) tail: function fixed parts (tailplane, fin) movable parts (elevators, rudder) structure (spars, ribs, skin) axes (longitudinal axis, lateral axis, vertical axis) movements (roll, pitch, yaw) control surfaces (ailerons, elevators, rudder) how they work fuselage: function truss type: structure (beams, skin) use monocoque type: structure (frames, bulkheads, skin) cons semimonocoque type: structure (frames, bulkheads, longerons, skin) pros landing gear: function unit: structure (wheel, tire, leg, brake) conventional type: components cons tricycle type: components pros use tandem type: components use non-retractable and retractable types

	Engine	<p>heat engine external combustion engine, internal combustion engine, rocket engine requirements</p> <p>reciprocating engine: power cycle inside the cylinder (intake stroke, compression stroke, power stroke, exhaust stroke)</p> <p>revolutions of the crankshaft transmission of power to the propeller use</p> <p>gas-turbine engine: turbojet type: structure (compressor, combustor, turbine) thrust pros and cons use</p> <p>turboprop type: structure (compressor, combustor, turbine, propeller) thrust pros and cons use</p> <p>turbofan type: structure (compressor, combustor, turbine, fan, 2nd duct) thrust pros use</p>
	Flight and propulsion instruments	<p>horizontal airspeed, vertical speed, height pitot-static system ASI, VSI, altimeter: functions how they work</p> <p>attitude around the horizontal and lateral axes, attitude around the vertical axis, direction gyroscope artificial horizon, turn-and-bank indicator, directional gyro: functions how they work</p> <p>engine speed rpm indicator</p> <p>engine temperature cylinder head temperature indicator, jet-pipe temperature indicator, turbine-gas temperature indicator</p> <p>oil temperature indicator</p> <p>engine pressure manifold pressure gauge oil pressure gauge</p> <p>fuel fuel tank contents indicator fuel flowmeter</p> <p>glass cockpit</p>
Civics	SDG 4	<p>history of education in England Europass CV</p>

STRUMENTI

testo adottato: Elizabeth Sharman, *Identity BI to BI+*, OUP, 2019

testo adottato: Raffaele Polichetti - Raffaella Beolè, *English in Aeronautics*, Loescher, 2019