



EESTI LENNUAKADEEMIA

Õppematerjalide ajakohasuse protokoll 2023/2024 õppeaasta

Õppematerjal on vastavuses Eesti Lennuakadeemia õppeprogrammile (MTOE 4.2.0, 4.2.1, 4.2.2, 4.2.3), Euroopa Komisjoni regulatsiooni Osa-66 liitega I.

Mooduli nr: Moodul 2

Õppematerjali nimetus: AIRCRAFT TECHNICAL BOOK (ATB) MODULE 2 - PHYSICS FOR B1 & B2 CERTIFICATION

Lisainfo: Aircraft Technical Book (ATB) paberkandjal ja e-raamatuna (B1, B2 kategooria)

Õppematerjali pealkiri: AIRCRAFT TECHNICAL BOOK (ATB) MODULE 2 - PHYSICS FOR B1 & B2 CERTIFICATION

Revisjoni number: 1

Kasutusperiood: september 2023 – september 2024

Heaks kiidetud veebikeskkond distantõppe
läbiviimiseks

Zoom (<https://zoom.us/>)

Google Classroom (classroom.google.com)

Protokolli koostamise kuupäev: 02.08.2023

MTO koolitusjuht: Madis Parv
(allkirjastatud digitaalselt)

ÕPPEMATERJALI VASTAVUSHINDAMISE KONTROLL-LEHT

Mooduli nr. ja nimetus: Module 2 Physics	Tase			Õppematerjali vastavus Osa-66 Lisa III mooduli programmile
	A	B1	B2	
2.1 Matter <i>Nature of matter: the chemical elements, structure of atoms, molecules; Chemical compounds; States: solid, liquid and gaseous; Changes between states.</i>	1	1	1	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
2.2 Mechanics 2.2.1 Statics <i>Forces, moments and couples, representation as vectors; Centre of gravity; Elements of theory of stress, strain and elasticity: tension, compression, shear and torsion; Nature and properties of solid, fluid and gas; Pressure and buoyancy in liquids (barometers).</i>	1	2	1	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
2.2.2 Kinetics <i>Linear movement: uniform motion in a straight line, motion under constant acceleration (motion under gravity); Rotational movement: uniform circular motion (centrifugal/centripetal forces); Periodic motion: pendular movement; Simple theory of vibration, harmonics and resonance; Velocity ratio, mechanical advantage and efficiency.</i>	1	2	1	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
2.2.3 Dynamics <i>(a) Mass; Force, inertia, work, power, energy (potential, kinetic and total energy), heat, efficiency; (b) Momentum, conservation of momentum; Impulse; Gyroscopic principles; Friction: nature and effects, coefficient of friction (rolling resistance).</i>	1	2	1	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
2.2.4 Fluid dynamics <i>(a) Specific gravity and density; (b) Viscosity, fluid resistance, effects of streamlining; Effects of compressibility on fluids; Static, dynamic and total pressure: Bernoulli's Theorem, venturi.</i>	2	2	2	
2.3 Thermodynamics <i>(a) Temperature: thermometers and temperature scales: Celsius, Fahrenheit and Kelvin; Heat definition; (b) Heat capacity, specific heat; Heat transfer: convection, radiation and conduction; Volumetric expansion; First and second law of thermodynamics;</i>	2 -	2 2	2 2	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta

