

Title (Fizyka) Physics	Code 10103143110104201023
Field Power Engineering	Year / Semester 1 / 1
Specialty -	Course core
Hours Lectures: 3 Classes: - Laboratory: 3 Projects / seminars: -	Number of credits 6
	Language polish

Lecturer:

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Status of the course in the study program:

Core course

Assumptions and objectives of the course:

Acquaintance of the students with the basic physical terms and laws as well as the physical experiment technique and experimental data analysis.

Contents of the course (course description):

Kinematics. Newton's Laws. Work and energy. Motion of a system of particles. Rotation of a rigid object. Harmonic oscillator. Mechanical waves. Thermodynamics - the kinetic theory of gases, the first and the second law of thermodynamics. Vectorial and scalar description of fields - gravitational field, electric field. Electric current. Magnetic field. Induction. Electromagnetic waves. Theory of relativity. Elements of geometrical and wave optics. Light and matter. Selected problems of atomic and nuclear physics.

Introductory courses and the required pre-knowledge:

Basic knowledge of physics at the grammar school level. Basic knowledge of mathematics at the first semester of undergraduate engineering studies level.

Courses form and teaching methods:

Lectures supported by multimedial presentations. Laboratory classes.

Form and terms of complete the course - requirements and assessment methods:

Lectures - written and oral examination. Laboratory classes - continuous assessment of initial theoretical knowledge at the start of the class and written report on carried out experiment.

Basic Bibliography:

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Additional Bibliography:

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