

Title <b>Physics</b>	Code <b>1010701211010700386</b>
Field <b>Chemical Technology</b>	Year / Semester <b>1 / 1</b>
Specialty -	Course <b>core</b>
Hours Lectures: <b>3</b> Classes: <b>1</b> Laboratory: -    Projects / seminars: -	Number of credits <b>7</b>
	Language <b>polish</b>

**Lecturer:**

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**Faculty:**

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**Status of the course in the study program:**

general/basic

**Assumptions and objectives of the course:**

students should obtain knowledge of fundamentals physical phenomena and their theoretical descriptions on the academic level in the fields of: mechanics, heat, molecular physics and gravitation field, electrodynamics, wave and corpuscular nature of light and matter.

**Contents of the course (course description):**

mechanics, kinematics and dynamics of progressive, rotational and oscillation motion. Simple machines. Equilibrium of right body. Gravitation. Statistics and dynamics of fluids. Heat and laws of thermodynamics. Harmonic motion and waves - acoustics. Electric and magnetic properties of matter. Electromagnetic waves. Geometrical optics. Nuclear physics - natural and artificial radioactivity. Topics of semiconducting physics. The basics of quantum mechanics.

**Introductory courses and the required pre-knowledge:**

basic knowledge of physics - secondary school level.

**Courses form and teaching methods:**

lectures supported by experiments and computer simulations of phenomena, calculation exercises

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

solution of objectives in writing, oral examination

**Basic Bibliography:**

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**Additional Bibliography:**

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