

Title Analytical Mechanics	Code 10102552110102101568
Field Mechanical Engineering	Year / Semester 1 / 1
Specialty -	Course core
Hours Lectures: 2 Classes: 10 Laboratory: - Projects / seminars: -	Number of credits 4
	Language polish

Lecturer:

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Faculty:

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Status of the course in the study program:

- Core course at the Faculty of Mechanical Engineering and Management, field of study - Mechanical Engineering.

Assumptions and objectives of the course:

- The students should obtain the knowledge on the classical particle and rigid-body mechanics.

Contents of the course (course description):

- Constrains, degrees of freedom, general coordinates, virtual displacements, the virtual work and the general forces, the general equations of dynamics, the principle of d'Alembert, the principle of virtual work, Lagrange's equations, Hamilton's equations, phase space, the principle of conservation

Introductory courses and the required pre-knowledge:

- Fundamentals of differential, integral and vector calculus.

Courses form and teaching methods:

- Lectures and classes.

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

- Written tests and oral examination.

Basic Bibliography:

Additional Bibliography: