Title Mechanics	Code 10102513310102102391
Field	Year / Semester
Mechatronics	2/3
Specialty	Course
•	core
Hours	Number of credits
Lectures: 1 Classes: 1 Laboratory: 1 Projects / seminars: -	4
	Language
	polish

#### Lecturer:

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# Status of the course in the study program:

- Core course at the Faculty of Mechanical Engineering and Management to the first degree studies of Mechatronics.

### Assumptions and objectives of the course:

- Ability to mechanical description of motion of material objects and constructions. Preparation to design of complex material systems.

# Contents of the course (course description):

Dynamical reactions. Vibrations of systems of one degree of freedom.
Elements of analytical mechanics. The principle of virtual work.
The Lagrange equations of the 2nd kind.

# Introductory courses and the required pre-knowledge:

- Basic knowledge of differential calculus, vector and matrix algebra.

### Courses form and teaching methods:

- Lectures illustrated by computer animations of constructions, classes, exam..

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

- Written tests.

# **Basic Bibliography:**

### **Additional Bibliography:**