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| Title Mechanisms and Machine Theory | Code 10102512510102102266 |
| Field Mechanical Engineering | Year / Semester 3 / 5 |
| Specialty - | Course core |
| Hours Lectures: 1 Classes: - Laboratory: - Projects / seminars: - | Number of credits 1 |
| | 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:

- Knowledge of the scope of theory of machines and mechanisms required for solving
technical problems connected with construction and exploitation of machines.

Contents of the course (course description):

- Structure of mechanisms Basic definitions. Classification of kinematic pairs.
Structural and functional classification of mechanisms. Kinematics of mechanisms.
Mobility of mechanisms. Analytical methods of kinematic analysis of lever mechanisms:
four-bar linkage, slider-crank mechanism. Total compensating torque.
Balancing of planar mechanisms. Selection of flywheel.

Introductory courses and the required pre-knowledge:

- Basic knowledge of calculus of vectors, differential calculus, static, kinematics
and dynamics of rigid body.

Courses form and teaching methods:

- Lectures.

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

- Test or project

Basic Bibliography:

Additional Bibliography: