

| | |
|---|------------------------------------|
| Title Mechanism Theory (Teoria mechanizmów) | Code 1010401141010210655 |
| Field EDUCATION IN TECHNOLOGY AND INFORMATICS | Year / Semester 2 / 4 |
| Specialty - | Course core |
| Hours Lectures: 1 Classes: - Laboratory: - Projects / seminars: - | Number of credits 2 |
| | Language polish |

Lecturer:

dr hab. inż. Jacek Buśkiewicz
Instytut Mechaniki Stosowanej
Poznań, ul. Piotrowo 3
Tel.: 61 6652301
Jacek.Buskiewicz@put.poznan.pl

Faculty:

Faculty of Technical Physics
ul. Nieszawska 13A
60-965 Poznań
tel. (061) 665-3160, fax. (061) 665-3201
e-mail: office_dtpf@put.poznan.pl

Status of the course in the study program:

Core course of the study for Education in Technology and Informatics, Faculty of Technical Physics.

Assumptions and objectives of the course:

Knowledge of theory of machines and mechanisms required for solving technical problems related 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. Special mechanisms: epicyclic gear trains, universal joint. Total compensating torque and engine power determination. Balancing of lever 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:

Theoretical and computer laboratory.

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

Test and project

Basic Bibliography:

-

Additional Bibliography:

-