

Title (Konstrukcja urządzeń rehabilitacyjnych)	Code 10102223310102102527
Field Mechatronics	Year / Semester 2 / 3
Specjalty Engineering in Medicine	Course core
Hours Lectures: 1 Classes: - Laboratory: - Projects / seminars: 1	Number of credits 2
	Language polish

Lecturer:

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Faculty:

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Status of the course in the study program:

Eligible course for the specialty Engineering in Medicine at the second degree stationary studies.

Assumptions and objectives of the course:

Presentation of the main problems of rehabilitation engineering.
Acquisition of the skills needed to design rehabilitation devices.

Contents of the course (course description):

Problems and development of rehabilitation engineering.
Chosen problems of mechanisms synthesis in design of rehabilitation devices.
Rehabilitation manipulators and robots.
Rails for pas-sive exercises of lower limbs and hip joint.
Structural assumptions of rehabilitation boards and chairs.
Static orthoses.
Examples of orthoses supporting and aiding in the performance of movement.
Design of particular devices on the base of given structural assumptions.

Introductory courses and the required pre-knowledge:

Basic knowledge of strength of materials, basics of machine design, biomedical engineering and computer aided engineering.

Courses form and teaching methods:

Lecture, project

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

Project

Basic Bibliography:

Additional Bibliography: