# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name Indoor cycling / Rowing machine [C\_CS>RS15]

#### Course

Field of study Architecture

Area of study (specialization)

Year/Semester 1/1

Profile of study general academic

**Bionics and Virtual Engineering** Technical Electrochemistry Production Informatics and Robotics **Production Informatics** Engineering of Implants and Prosthesis **Construction Engineering and Management** Composites and Nanomaterials Machine Design Structural Engineering Supply Chain Logistics **Corporate Logistics** Metal and Plastics Materials **Nanomaterials** Aircraft Piloting Aircraft Engines and Airframes Logistics Systems **Onboard Systems and Aircraft Propulsion Production Systems** Organic Technology Polymer Technology Medical and Rehabilitation Devices Virtual Engineering Managing Enterprise of the Future **Enterprise Resource and Process Management** Integrated Work Safety Management null Course offered in Level of study first-cycle Polish Form of study Requirements full-time elective Number of hours Other Lecture Laboratory classes 0 0 0 Tutorials Projects/seminars 15 0 Number of credit points 0,00

## Coordinators

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#### **Prerequisites**

no contraindications

### **Course objective**

Classes on a rowing ergometer enable endurance training that evenly engages all major muscle groups and improves the efficiency of the cardiovascular system. In addition, they support fat burning and increase the body's ability to absorb oxygen. The natural rowing movement allows you to harmoniously shape the muscles of the legs, back, shoulders, buttocks, arms and abdomen, while improving the functioning of the circulatory and respiratory systems. These classes have a great impact on improving health and instill in the trainee the desire to continue caring for their own health and physical and mental condition. Exercise bike classes are one of the forms of aerobic training. Classes are held on Spinner Pro Plus and Shwinn Evolution bikes. They are conducted by qualified instructors to the rhythm of carefully selected music, which helps maintain the appropriate driving rhythm. The classes consist of three parts: warm-up (consisting of riding at a leisurely pace, preparing for further riding), the main part (consisting of continuous riding with variable pace and load) and the final part (the so-called cool-down, during which we slow down the rotational movement and calm the body after intense driving). During typical classes that last approximately 75 minutes, participants burn up to 800 calories, increase physical and mental strength, and improve endurance. They also reduce the risk of cardiovascular diseases. The benefits of cycling to music include: increasing general efficiency and improving fitness increasing the efficiency of the circulatory system prevention of coronary heart disease and hypertension increasing the efficiency of the respiratory system strengthening the skeletal system prevention of osteoporosis change in body composition mental relaxation :)

#### Course-related learning outcomes

The student is able to correctly set the equipment according to its parameters Knows the rules of warm-up and aerobic or anaerobic training It can estimate your fitness level based on your heart rate Performs calming and stretching exercises independently Adjusts the difficulty of tasks to individual needs Is able to make an objective self-assessment in relation to the requirements set for himself

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Completing the course is achieved through active and regular participation in classes.

One absence is allowed without the obligation to make up or justify it for 15 hours per semester. The student is obliged to make up for remaining absences and short-term sick leave in consultation with his/ her teacher.

It is possible to complete two classes a week.

You can participate in physical education classes no more than once a day.

Classes must be made up on a day other than the scheduled classes.

## **Programme content**

Getting to know the equipment, adjusting the settings to your own body parameters Learning the technique Conducting a warm-up The use of equipment to develop motor skills - strength and endurance Using your heart rate to determine your physical activity level

## **Course topics**

#### Lecturers

mgr Arkadiusz Jarentowski arkadiusz.jarentowski@put.poznan.pl Rules for the safe use of a rowing ergometer Setting the equipment according to body parameters Technique of riding on a rowing ergometer General endurance training Special endurance training Heart rate measurement and physical load Harmonious shaping of the muscles of the legs, back, shoulders, buttocks, arms and abdomen Training with a variable pace Group competition

Rules for safe use of an exercise bike Setting the equipment (saddle and handlebar) according to body parameters Stationary bike riding technique Learning the warm-up (riding at a leisurely pace, preparing for further riding), the main part (continuous riding with variable pace and load) and the final part (so-called calming down and calming down the body after intense work. Maintaining an appropriate riding rhythm.

## **Teaching methods**

practical methods: practical exercises, reporting methods: description and explanation with underlining most often mistakes made exposing methods: demonstration, error analysis

## **Bibliography**

ERGOMETER CONCEPT II USER'S GUIDE

Cycling.Training basics Dominik Lau

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	15	0,00
Classes requiring direct contact with the teacher	15	0,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	0	0,00