COURSE DESCRIPTION CARD - SYLLABUS

Course name
Cooling automatics

Course

Field of study
Transport

Year/Semester
3/6

Area of study (specialization)

Profile of study
general academic

Level of study
First-cycle studies

Course offered in
polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
15

Laboratory classes
15

Other (e.g. online)
0

Tutorials
0

Projects/seminars
0

Number of credit points

1

Lecturers

Responsible for the course/lecturer:
dr inż. Tomasz Rochatka

Faculty of Civil and Transport Engineering

Responsible for the course/lecturer:

Prerequisites

Has basic knowledge of physics, mechanics and strength of materials

Course objective

Getting to know the elements of automatic coolers

Course-related learning outcomes

Knowledge

The student has an ordered, theoretically founded general knowledge of technology, transport systems and various means of transport

The student has knowledge of important development trends and the most important technical achievements and of other related scientific disciplines, in particular transport engineering

Skills

The student is able to take into account in the process of formulating and solving tasks in the field of transport engineering also non-transport aspects, in particular social, legal and economic issues

Student is able to make a critical analysis of the functioning of transport systems and other technical solutions and to evaluate these solutions, including: is able to effectively participate in the technical inspection and assess the transport task from the point of view of non-functional requirements, has the ability to systematically conduct functional tests

Social competences

The student is aware of the social role of a technical university graduate, in particular, he/she understands the need to formulate and transfer to the society, in an appropriate style, information and opinions on engineering activities, technological achievements, as well as the achievements and traditions of the transport engineer profession

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Credit based on the test of knowledge of the lectures and the current control of preparation for laboratory exercises and assessment of their course and reports.

Programme content

Scientific knowledge. Development of automation, concepts related to automation, automatic systems, methods of regulating refrigeration systems, regulation and control of compressors, evaporators and condensers, controllers of cooling systems.

Teaching methods

1. Lecture with multimedia presentation

2. Laboratory with taking measurements

Bibliography

Basic

1. Bonca Z. Automatyka chłodnicza i klimatyzacyjna. Wyd. WSM Gdynia 1995.

2. Ullirch H.J., Technika chłodnicza - poradnik. IPPU MASTA, Gdańsk 1998.

Additional

Breakdown of average student's workload

	Hours	ECTS
Total workload	35	1,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	5	0,0

[1] delete or add other activities as appropriate