



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Legal regulations in refrigeration [N2Trans1-TrCh>RPwCh]

### Course

Field of study

Transport

Year/Semester

1/1

Area of study (specialization)

Refrigerated Transport

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

part-time

Requirements

compulsory

### Number of hours

Lecture

9

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

### Number of credit points

1,00

### Coordinators

dr hab. inż. Krzysztof Bieńczak prof. PP  
krzysztof.bieniczak@put.poznan.pl

### Lecturers

### Prerequisites

Knowledge: The student has a basic knowledge of the principles of operation of a transport company.

Skills: The student is able to think analytically, interpret the described phenomena Social competences:

Work in an interdisciplinary team. Ability to lead a team and expand team knowledge.

### Course objective

Presentation of legal acts in force in refrigeration.

### Course-related learning outcomes

Knowledge:

Student has a structured and theoretically founded general knowledge related to key issues in the field of transport engineering.

Student knows the economic, legal and other conditions of the activities of transport companies.

Skills:

Student is able to obtain information from literature, databases and other sources (in Polish and English), integrate them, interpret and critically evaluate them, draw conclusions and formulate and

exhaustively justify opinions.

Student is able to use information and communication techniques used in the implementation of projects in the field of transport.

Social competences:

Student understands that in the field of transport engineering, knowledge and skills very quickly become obsolete.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

The knowledge acquired during the lecture is verified on the basis of a written test in the form of a test.

### Programme content

Hazards caused by refrigeration and air conditioning equipment. Legal acts (European Union, Poland) regulating the construction and operation of refrigeration equipment. Management of refrigerants. Technical supervision requirements for the safety of refrigeration installations. Leak detection methods in refrigeration installations. Documentation of service activities.

### Course topics

none

### Teaching methods

1. Lecture with multimedia presentation

### Bibliography

Basic

1. Aktualnie obowiązujące akty prawne Wspólnoty Europejskiej oraz krajowe.
2. B. Guziński, Klimatyzacja pojazdów samochodowych, Systherm Serwis, Poznań 2016
3. K. Kalinowski, Amoniakalne urządzenia chłodnicze, tom 2, Masta, Gdansk 2005

Additional

1. B. Gaziński (red.), Technika chłodnicza dla praktyków, Systherm Serwis, Poznań 2003

### Breakdown of average student's workload

|   | Hours | ECTS |
|---|-------|------|
| Total workload  | 20    | 1,00 |
| Classes requiring direct contact with the teacher   | 9     | 0,50 |
| Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation) | 11    | 0,50 |