



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Monitoring the activities of railway entities

### Course

Field of study

Year/Semester

Transportation

4/7

Area of study (specialization)

Profile of study

Railway Transport

general academic

Level of study

Course offered in

First-cycle studies

Polish

Form of study

Requirements

part-time

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

9

18

Tutorials

Projects/seminars

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

dr inż. Piotr Smoczyński

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### Prerequisites

Basic computer skills and group work skills, knowledge of the organization of railway transport

### Course objective

Provide students with knowledge in the field of supervision over safety management systems and maintenance in rail transport

### Course-related learning outcomes

Knowledge

1. The student has ordered and theoretically founded general knowledge in the field of key issues of technology and detailed knowledge in the field of selected issues in this discipline of transport engineering.

Skills

1. The student is able to obtain information from various sources, including literature and databases (both in Polish and in English), integrate it properly, interpret it and critically evaluate it, draw conclusions, and comprehensively justify his/her opinion.



### Social competences

1. The student is aware of the importance of knowledge in solving engineering problems, knows examples and understands the causes of malfunctioning transport systems that have led to serious financial and social losses or to serious loss of health and even life.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: passing the test consisting of four obligatory questions of various difficulty levels:

1. Question regarding the reconstruction of information from lectures (for 3.0)
2. The question verifying the understanding of the lecture knowledge (4.0)
3. A question verifying the ability to solve problems analogous to those discussed in the lectures (4.5)
4. Problem question, requiring supplementing the opinion based on the literature (5.0).

Students answer the questions in the order given, and the grade results from the last question to which they answered correctly.

The effects of laboratory classes are verified on an ongoing basis by the teacher

### Programme content

Safety management systems - genesis, basic elements. Requirements for safety management systems in rail transport. Requirements for maintenance management systems in rail transport. The role and functioning of the Railway Transport Office. Inspections by the President of the Railway Transport Office

### Teaching methods

Informative and conversational lecture with the use of boards and multimedia content. Project method - independent preparation of the safety management system documentation for the railway undertaking

### Bibliography

Basic

Material on safety and maintenance management systems available on the website of the EU Railway Agency ([era.europa.eu](http://era.europa.eu))

Additional

Smoczyński P., Zarządzanie bezpieczeństwem w transporcie kolejowym Unii Europejskiej, Wydawnictwo Ekslibris.eu, Poznań 2019, ISBN 978-83-953636-0-3



### Breakdown of average student's workload

	Hours	ECTS
Total workload	72	4,0
Classes requiring direct contact with the teacher	27	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	45	2,0

<sup>1</sup> delete or add other activities as appropriate