



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Logistics of liquid and gas transmission

Course

Field of study

Year/Semester

Transport

2/3

Area of study (specialization)

Profile of study

Engineering of Pipeline Transport

general academic

Level of study

Course offered in

Second-cycle studies

Polish

Form of study

Requirements

full-time

elective

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

15

Tutorials

Projects/seminars

Number of credit points

1

Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

PhD Przemysław Grzymisławski

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Faculty of Environmental Engineering and
Energy

Piotrowo 3 street, 60-965 Poznan

Prerequisites

Flow mechanics. Construction of pipeline systems and networks. Management in pipeline transport. Ability to rationally evaluate shipments and storage. Graphical and mathematical interpretation of shipments and cost sources in pipeline transport. Strategic understanding of energy and gas needs on a national scale. Industrial and commercial aspects of energy and gas shortages. Psychological aspect of the lack of energy and gas.

Course objective

To familiarize students with the basics of knowledge about the logistics aspects of the transmission /



transport of liquids and gases. Preparation for managing this type of transport based on qualitative and quantitative methods

Course-related learning outcomes

Knowledge

has ordered and theoretically founded general knowledge related to key issues in the field of transport engineering

has knowledge of development trends and the most important new achievements of means of transport and other selected related scientific disciplines

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

Skills

is able to obtain information from literature, databases and other sources (in Polish and English), integrate them, perform their interpretation and critical assessment, draw conclusions and formulate and comprehensively justify opinions

is able to communicate in Polish and English using various techniques in a professional environment and in other environments, also using transport engineering issues

Social competences

understands that in the field of transport engineering, knowledge and skills are rapidly becoming obsolete

understands the importance of using the latest knowledge in the field of transport engineering in solving research and practical problems

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture - written exam. Obtaining credit from a minimum of 51% of the points possible to get. There is a possibility of an oral question to raise the grade.

Programme content

Introduction to the subject? definition of logistics, transport, including pipelines, liquids

and gases as freight. Features and distinctiveness of fluid transmission / transport logistics against the background of logistics / total transport. Organization / design of liquid and gas transmission networks and networks and their distribution? types, elements and their functions. Network Management. Forecasting transmission needs. Legal aspects. Infrastructure of pipeline transmission networks in Poland. Means of transport of liquids. Distinguishing features of the transmission network operation system and their monitoring

Teaching methods

Informative lecture (conventional) (information transfer in a systematic way)



Bibliography

Basic

1. Logistyka / Zdzisław Sarjusz-Wolski, Czesław Skowronek. Centrum Informacji Menedżera, 1995.
2. Terminologia logistyczna : pojęcia i ich definicje / [weryfikacja: Marek Fertsch [et al.] ; tł. Konrad Majchrzak, Tomasz Gołębiowski, Ewa Iwicka]. Instytut Logistyki i Magazynowania, 1996.

Additional

1. Zarys logistyki z ćwiczeniami / Abt Stefan. Wydaw.AE., 1993.

Breakdown of average student's workload

	Hours	ECTS
Total workload	30	1,0
Classes requiring direct contact with the teacher	15	0,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests) ¹	15	0,5

¹ delete or add other activities as appropriate