



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Logistics engineering

### Course

Field of study

logistics

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

2/4

Profile of study

general academic

Course offered in

polish

Requirements

elective

### Number of hours

Lecture

15

Laboratory classes

Tutorials

Projects/seminars

15

Other (e.g. online)

### Number of credit points

5

### Lecturers

Responsible for the course/lecturer:

prof. dr hab. inż. Marek Fertsch

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60-965 Poznań

Responsible for the course/lecturer:

### Prerequisites

The student starting this subject should have a basic knowledge of logistics. He should also be able to obtain information from specified sources and be willing to cooperate as part of a team.

### Course objective

Mastering the student's knowledge, skills and social competences related to the applications of logistics engineering

### Course-related learning outcomes

Knowledge



-- knows the basic concepts of logistics and its specific issues and supply chain management [P6S\_WG\_05]

-know the basic issues of the life cycle of socio-technical systems (logistics systems) and the life cycle of industrial products [P6S\_WG\_06]

- knows the basic management issues specific to logistics and supply chain management [P6S\_WG\_08]

#### Skills

- is able to apply the right experimental and measuring techniques to solve the problem within the studied subject, including computer simulation in logistics and its specific issues, and supply chain management [P6S\_UW\_03]

- is able to prepare the means of work necessary to work in an industrial environment and knows the safety principles associated with this work, including safety problems in logistics [P6S\_UW\_05]

- is able to assess and make a critical economic analysis of the selected problem, which falls within the framework of logistics and its specific issues, and supply chain management [P6S\_UW\_06]

- can design an object, system or process that meets the requirements of logistics and its specific issues and supply chain management using appropriate methods and techniques [P6S\_UW\_07]

- can present, using properly selected means, a problem that falls within logistics and its specific issues, and supply chain management [P6S\_UK\_01]

#### Social competences

- is aware of the recognition of the importance of knowledge in the field of logistics and supply chain management in solving cognitive and practical problems [P6S\_KK\_02]

- is aware of initiating activities related to the formulation and transfer of information and cooperation in society in the field of logistics [P6S\_KO\_02]

- is aware of the responsible fulfillment, correct identification and resolution of dilemmas related to the logistics profession [P6S\_KR\_02]

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

assessment based on a team-developed project,

grade based on written credit (exam)

#### Programme content

Logistic systems. Logistic processes. Logistic system and logistics process as a design object. Logistics development phases. The place of logistics engineering in logistics development. Methodical foundations of logistics engineering. Planning in logistics. Exchange of information in logistics systems

#### Teaching methods



1. Lecture: multimedia presentation, illustrated with examples on the board. 2. Projects: multimedia presentation illustrated with examples given on the board and performance of tasks given by the teacher.

### Bibliography

#### Basic

Blanchard B., Logistics engineering and management, Prentice – Hall, Inc., Englewood Cliffs, New Jersey 1992

Fertsch M. (red)., Elementy inżynierii logistycznej, Wydawnictwo ILiM, Poznań, 2017

#### Additional

Pfohl H.- Ch., Systemy logistyczne. Podstawy organizacji i zarządzania. Wydawnictwo ILiM, Poznań, 2002.

Don Taylor G., Introduction to logistics Engineering, CRC Press, Taylor& Francis Group, Boca Raton, London, New York, 2009..

### Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,0
Classes requiring direct contact with the teacher	30	3,0
Student's own work (literature studies, preparation for exam, project preparation) <sup>1</sup>	95	2,0

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