

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

COURSE DESCRIPTION CARD - SYLLABUS

Course	name
Logistic	s 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	Laboratory classes	Other (e.g. online)
15		
Tutorials	Projects/seminars	
	15	
Number of credit points		

5

Lecturers

Responsible for the course/lecturer: Prof. Marek Fertsch, Ph.D., D.Sc., Eng., Mail to: marek.fertsch@put.poznan.pl Phone: 48 61 665 3416

Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznań

Responsible for the course/lecturer:



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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:



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The knowledge gained during the lectures is verified by the college in the last classes and / or by tests (quizzes) in individual classes (through the Moodle platform). Passing threshold: 50% of points.

Skills acquired as part of assessing the progress of project tasks or the progress of project tasks or the progress of project tasks. Passing threshold: 50% of points.

Programme content

Lectures:

Logistic systems. Logistics processes. Logistic system and logistic process as an object of design. Logistics development phases. The place of logistics engineering in the development of logistics. Methodological foundations of logistics engineering. Planning in logistics. Information exchange in logistic systems.

Project:

modeling of logistic processes, BPMN methodology, IDEFO methodology, index evaluation of logistic process implementation.

Teaching methods

Lecture: informative (conventional) lecture - providing information in a structured way, supported by a multimedia presentation, illustrated with examples and tasks, and the case study method - analysis of specific illustrative (illustrative) or problematic (problem identification) cases.

Project: project method - individual or team implementation of a large, multi-stage cognitive or practical task, the effect of which is the creation of a work.

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..

Wener-Lewandowska K., Kosacka -Olejnik M., Logistics engineering application in the logistics maturity model for the service enterprises, Proceedings of the 14th International Conference of Logistics and SCM systems : Smart Supply Chain in an Uncertain World - the past, the present, and the future / red. Vincent F. Yu, Voratas Kachitvichyanukul, Kune-Muh Tsai: Chinese Maritime Institute, 2019 - s. 229-236



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Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,0
Classes requiring direct contact with the teacher	40	2,0
Student's own work (literature studies, preparation for exam,	85	3,0
project preparation) ¹		

¹ delete or add other activities as appropriate