POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

COURSE DESCRIPTION CARD - SYLLABUS

Course name
Informatic systems in logistics

Course

Field of study
Logistics

Year/Semester
1/2

Area of study (specialization)
Corporate Logistics

Profile of study
general academic

Level of study
Second-cycle studies

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
15	30	
Tutorials	Projects/seminars	

Number of credit points
5

Lecturers

Responsible for the course/lecturer:

Ph.D., Eng., Katarzyna Ragin-Skorecka

Mail to: katarzyna.ragin-skorecka@put.poznan.pl

Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznań

Responsible for the course/lecturer:

Ph.D., D.Sc., Eng., Jacek Żak, University Professor

Mail to: jacek.zak@put.poznan.pl

Faculty of Engineering Management

ul. Piotrowo 3, 61-138 Poznań

Prerequisites

Has basic knowledge in computer science, logistics and management sciences

Course objective

Students will learn about the main issues related to information systems used in logistics

Course-related learning outcomes

Knowledge

1. Knows extended concepts for logistics and supply chain management as well as dependencies related to IT systems used in logistics [P7S_WG_01, P7S_WG_05]

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2. Knows detailed methods, tools and techniques characteristic in the context of information systems in logistics [P7S_WK_01]

3. Knows phenomena and contemporary trends and best practices in the context of information systems characteristic of logistics and its specific issues and supply chain management [P7S_WK_03, P7S_WK_04]

Skills

1. Is able to gather based on literature and other sources (in Polish and English) and present information on information systems in logistics in an orderly manner [P7S_UW_01]

2. Is able to communicate using properly selected means in a professional environment and in other environments using information systems as part of logistics and its specific issues, and supply chain management [P7S_UW_03]

3. Is able to apply the right experimental and measurement, information and communication techniques to solve the problem in the context of the IT system, including computer simulation in logistics and its specific issues, and supply chain management [P7S_UW_04]

4. Is able to assess the usefulness and possibility of using new achievements in the field of IT systems in logistics and functionally related areas [P7S_UW_06]

5. Is able to design, using properly selected means, an experiment, analysis process or scientific research solving a problem in the area of IT systems within logistics and its specific issues, and supply chain management [P7S_UK_01]

6. Is able to formulate and solve tasks related to IT systems through interdisciplinary integration of knowledge from the fields and disciplines used to design logistics systems [P7S_UO_01]

7. Is able to identify for IT systems in logistics changes in requirements, standards, regulations, technical progress and the reality of the labor market, and based on them determine the needs to supplement own and other knowledge [P7S_UU_01]

Social competences

1. Is aware of the responsibility for own work and readiness to comply with the principles of teamwork and taking responsibility for jointly implemented tasks with particular emphasis on the use of IT systems in logistics [P7S_KR_01]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lectures: problem tasks (4 tasks of 15 points), final test - exam (40 points); pass mark: 50%

Laboratories: current class work, created database; pass mark: 50%

Programme content

As part of the course, an overview of issues related to the use of IT systems in logistics will be presented.

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The scope of the lectures includes: Integrated IT systems in the enterprise; Database, model database, user interface in an IT system; systems supporting electronic data exchange; Product coding and identification systems, warehouse management systems - WMS; IT systems supporting supply chain management - SCM and customer relationship management systems - CRM; IT systems supporting production management - CIM and decision support systems - SWD; Selected mobile IT systems in logistics

The scope of laboratories includes: development of a database model and its implementation

Teaching methods

Lecture - informative lecture, seminar, case study

Laboratories - laboratory method, project method, brainstorming, demonstration method

Bibliography

Basic

1. Milewski R., Stankiewicz G.: Systemy informatyczne w logistyce. Wyd. WSOWL, Wrocław 2015 (Skrypt i materiały do ćwiczeń).

2. Bojar W., Rostek K., Knopik L.: Systemy wspomagania decyzji. PWE, Warszawa 2014.

3. Szymonik A.: Technologie Informatyczne w Logistyce, Placet, Łódź 2010.

4. Majewski J.: Informatyka dla logistyki, Biblioteka Logistyka, Poznań 2006.

5. Kanicki T.: Systemy informatyczne w logistyce (Computer systems in logistics), Economy and Management – No. 4, 2011, ss. 86 – 97.

6. Żak J., Hadas Y., Rossi R. (Eds.): Advanced Concepts, Methodologies and Technologies for Transportation and Logistics. Springer, Heidelberg 2018.

Additional

1. Jain L., Peng Lim C.(Eds.): Handbook on Decision Making. Springer Verlag, Berlin – Heidelberg, 2010. (Wybrane rozdziały, np. Mora M. (et al): Intelligent Decision Support Systems Methodology ss. 29-54; Żak J.: Decision Support Systems in Transportation), ss. 249 – 294.

2. Szymonik A.: Informatyka dla potrzeb logistyka(i), Wyd. PWN, Warszawa 2015

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Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,0
Classes requiring direct contact with the teacher	45	1,5
Student's own work (literature studies, preparation for laboratory classes, preparation for exam, completing problem tasks, creating a database) [1]	80	3,5

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[1] delete or add other activities as appropriate