COURSE DESCRIPTION CARD - SYLLABUS

Course name

Warehouse management

Course

Field of study	Year/Semester
Engineering Management	3/6
Area of study (specialization)	Profile of study
	general academic
Level of study	Course offered in
First-cycle studies	Polish
Form of study	Requirements
full-time	elective

Number of hours

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

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

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Responsible for the course/lecturer:

Prerequisites

The student starting this subject should have a basic knowledge of logistics and basics of inventory management. The student has the ability to perceive, associate and interpret phenomena occurring in the enterprise. The student understands the responsibility for decisions taken in the field of warehouse management.

Course objective

To familiarize students with the essence and principles of warehouse management. Students learn basic solutions used in warehouse management.

Course-related learning outcomes

Knowledge

The student defines key concepts related to warehouse management, including warehouse layouts and warehouse zones [P6S_WG_15].

The student describes methods of optimizing warehouse operations, including the use of technical equipment and warehouse documentation [P6S_WG_16].

The student characterizes inventory processes and health and safety rules in the context of warehouse management [P6S_WG_17].

Skills

The student calculates pallet racking slots, warehouse modules, and forms palletized load units, using analytical methods [P6S_UW_10].

The student analyzes and optimizes warehouse processes, considering various systemic aspects [P6S_UW_11].

The student conducts a preliminary economic analysis of warehouse operations, using operational indicators [P6S_UW_12].

The student analyzes warehouse documentation and processes in terms of their efficiency [P6S_UW_13].

Social competences

The student consciously makes decisions related to warehouse management, considering various management aspects [P6S_KO_02].

The student recognizes the responsibility for decisions related to warehouse management, taking into account their impact on the environment and society [P6S_KR_01].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Forming note:

In the scope of tutorials:

based on student activity during classes (independent workand in groups, expressing your own views and opinions).

In the scope of lectures: based on answers to questions about the material discussed in the lectures.

Summarizing note:

In the scope of tutorials: Skills acquired as part of the tutorials are verified on the basis of developed decision algorithms and a final test, consisting of 3-4 tasks scored differently depending on their level of difficulty. Passing threshold: 60% of points.

In the scope of lectures: written credit, answers to open questions; credit is possible after obtaining a minimum of 60% of points.

Programme content

Lectures: Warehouse process from A to Z. Storage systems/storage areas. Stock distribution in the warehouse. Optimization of warehouse work. Warehouse documentation. Inventory and OHS. Technical equipment in the warehouse. Operational indicators of warehouse management.

Tutorials: Warehouse process algorithms. Warehouse documentation. Formation of pallet loading units. Calculation of row of racks. Calculation of warehouse modules. Calculation of operational indicators.

Teaching methods

In the field of lectures: informative lecture, conversational lecture.

In the scope of independent work: work with the book.

In the scope of tutorials: multimedia presentation illustrated with examples given on a blackboard and performance of tasks given by the teacher - practical exercises, subject exercises, case-based method, didactic discussion.

Bibliography

Basic

1. Fertsch M., Projektowanie magazynów, [w:] Fertsch M. (red.), Elementy inżynierii logistycznej, Wydawnictwo Instytutu Logistyki i Magazynowania, Poznań, 2017.

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3. Korzeniowski A. (red.), Zarządzanie gospodarką magazynową, PWE, Warszawa, 1997.

4. Korzeń Z., Logistyczne systemy transportu bliskiego i magazynowania, Tom 1 i 2, Biblioteka Logistyka, Wydawnictwo ILiM, Poznań, 1998.

5. Dudziński Z., Poradnik organizatora gospodarki magazynowej w przedsiębiorstwie, PWE, Warszawa, 2012.

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11. Ten Hompel M., Schmidt T., Warehouse management, Berlin HeidelbergEmmett, Springer, 2008.

12. Emmett S., Excellence in warehouse management: how to minimise costs and maximise value, John Wiley & Sons Inc, New Jersey, 2005.

Additional

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4. Oleśków-Szłapka J., Stachowiak A., The use of computer simulation in warehouse automation, [w:] Advances in Sustainable and Competitive Manufacturing Systems, Lecture Notes in Mechanical Engineering. Red. Azevedo, Américo, Springer 2013.

5. Bottani E., Montanari R., Rinaldi M., Vignali G., Intelligent algorithms for warehouse management [in:] Intelligent Techniques in Engineering Management, Springer, 2015.

6. Cham van den Berg J.P., Highly competitive warehouse management, Booksurge, USA, 2012.

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for tutorials, preparation for tests)[1]	20	1,0

[1] delete or add other activities as appropriate