



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

COURSE DESCRIPTION CARD - SYLLABUS

Course name Warehouse management

Course

Field of studyYear/SemesterEngineering ManagementProfile of studyArea of study (specialization)Profile of studyLevel of studyCourse offered in
PolishFirst-cycle studiesPolishForm of studyRequirements
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:Responsible for the course/lecturer:Joanna Oleśków Szłapka Ph.D., Eng.Irena Pawłyszyn Ph.D., Eng.joanna.oleskow-szlapka@put.poznan.plirena.pawlyszyn@put.poznan.plFaculty of Engineering ManagementFaculty of Engineering Management2 Jacek Rychlewski Str. , 60-965 Poznan2 Jacek Rychlewski Str. , 60-965 Poznan

Prerequisites

The student starting this subject should have a basic knowledge of logistics and basics of inventory



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

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

Student defines the phases of the storage process (WM_K01)

Student lists and characterizes elements of the logistics infrastructure in the storage process (WM_K02)

Student lists and characterizes warehouse management tools (WM_K03)

Skills

Student selects appropriate (from the point of view of goals and restrictions) methods and tools for given organizational conditions in the field of warehouse management (WM_S01)

Student performs critical analysis of known methods and tools, identifies differences and common areas (WM_S02)

Student assesses the effectiveness of applied solutions from the point of view of warehouse management (WM S03)

Student is able to make a critical analysis of technological processes in the field of warehouse management (WM_S04)

Social competences

Student identifies the gap between expected and obtained business effects in warehouse management (WM_SC01)

Student takes discussion, applies problem-solving tools (WM_SC02)

Student works in the team (WM_SC03)

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



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

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:

- 1. Warehouse process from A to Z;
- 2. Storage systems / storage areas;
- 3. Stock distribution in the warehouse
- 4. Optimization of warehouse work;
- 5. Warehouse documentation;
- 6. Inventory and OHS;
- 7. Technical equipment in the warehouse;
- 8. Operational indicators of warehouse management

Tutorials:

- 1. Warehouse process algorithms.
- 2. Warehouse documentation.
- 3. Formation of pallet loading units.
- 4. Calculation of row of racks.
- 5. Calculation of warehouse modules.
- 6. Calculation of operational indicators.

Teaching methods

Didactic methods

In the field of lectures:



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

- 1. Informative lecture
- 2. Conversational lecture
- In the scope of independent work:
- 1. Work with the book
- In the scope of tutorials:

1. multimedia presentation illustrated with examples given on a blackboard and performance of tasks given by the teacher - practical exercises

- 2. Subject exercises
- 3. Case-based method
- 4. Didactic discussion

Bibliography

Basic

1. Richards, G. (2017). Warehouse management: a complete guide to improving efficiency and minimizing costs in the modern warehouse. Kogan Page Publishers.

2. Smith, J. D. (1998). The warehouse management handbook. Tompkins press.

3. Ten Hompel, M., & Schmidt, T. (2008). Warehouse management. Springer Berlin HeidelbergEmmett,

4. S. (2005). Excellence in warehouse management: how to minimise costs and maximise value. John Wiley & Sons..

Additional

1. Bottani, E., Montanari, R., Rinaldi, M., & Vignali, G. (2015). Intelligent algorithms for warehouse management. In Intelligent Techniques in Engineering Management (pp. 645-667). Springer,

2. Cham.Van den Berg, J. P. (2012). Highly competitive warehouse management. USA: Booksurge.



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

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	20	1,0
laboratory classes/tutorials, preparation for tests/exam, project		
preparation) ¹		

¹ delete or add other activities as appropriate