



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Information systems

### Course

Field of study

Materials Engineering

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/1

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

15

Laboratory classes

15

Other (e.g. online)

Tutorials

Projects/seminars

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

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ul. Piotrowo 3, 60-965 Poznań

Responsible for the course/lecturer:

### Prerequisites

The basic of computer science, database systems and production management. Logical thinking, the use of information obtained from libraries and the Internet and databases. Understanding the need to learn and acquire new knowledge.

### Course objective

Knowing the theoretical and practical issues related to the design and implementation of information systems in various areas of businesses.

### Course-related learning outcomes

Knowledge

Selects solutions for the defined area of organizational - [K\_W12, K\_W13]



Lists and characterized by systems used in the enterprise in different areas - [K\_W12, K\_W13]

Explains the basic principles of designing information systems - [K\_W12, K\_W13]

Proposes the use of selected methods for implementation of information systems - [K\_W12, K\_W13]

#### Skills

Places the use of computer support to different areas of the company with particular emphasis on management - [K\_U07, K\_U14]

Can propose the implementation of an information system for the division of that company - [K\_U07, K\_U14]

Places your inventory management and demand planning material the use of information systems - [K\_U07, K\_U14]

#### Social competences

Able to work in a team - [K\_K03]

Is aware of the role of IT in business engineering - [K\_K07]

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

Learning outcomes presented above are verified as follows:

Intermediate rating:

Laboratory: on the basis of an assessment of the progress of laboratory tasks

Lecture : based on answers to questions about the material discussed in previous lectures.

Summary rating:

Laboratory: credit based on tasks performer during laboratory ( credit on computer workstation) and the implementation of the report of the exercises. The student must obtain a positive assessment of the executed report.

Lecture: credit based on test consisting of open questions in a scale 0-1. Test is passed after obtaining at least 55% of all points. Discussion of the test results. Test is carried out at the end of the semester.

#### Programme content

Lecture:

1. Construction of systems used in the enterprise.
2. Classification systems.
3. Systems Consulting.
4. Management Information Systems.



5. Today's integrated management information systems (ERP - Enterprise Resources Planning and ERP II).
6. PDM systems, DDM, EDM, CRM.
7. Basics of designing information systems.
8. Implementation of information systems in the enterprise.

Laboratory:

1. The characteristics of information area.
2. Description of the group of systems to meet the requirements.
3. Summary of requirements for the system.
4. Development of the evaluation procedure.
5. Justification for the choice of the system.
6. Brief description of the system.
7. Develop an implementation team structure.
8. Developing the project structure using structural list.
9. Develop a schedule to implement the system in MS Project (phases, tasks, durations, allocated resources, milestones).

### Teaching methods

Lecture: multimedia presentation illustrated with examples given on a board, problem solving.

Laboratory: solving tasks at the computer. Practical exercises and discussion.

### Bibliography

Basic

1. Januszewski A, Funkcjonalność informatycznych systemów zarządzania. Zintegrowane systemy transakcyjne tom.1, PWN, Warszawa, 2008
2. Komputerowe wspomaganie zarządzania przedsiębiorstwem, Knosala R., PWE, Warszawa, 2007
3. Banaszak Z., Kłos S., Mleczek J., Zintegrowane systemy zarządzania, PWE warszawa, 2014

Additional

1. Techniki komputerowe w przedsiębiorstwie, Z. Weiss, Wydawnictwo Politechniki Poznańskiej, Poznań, 1998
2. Chlebus E., Techniki komputerowe CAx w inżynierii produkcji, WNT, Warszawa 2000



### Breakdown of average student's workload

	Hours	ECTS
Total workload	58	2,0
Classes requiring direct contact with the teacher	33	1,0
Student's own work (literature studies, preparation for laboratory , preparation for tests, project preparation) <sup>1</sup>	25	1,0

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