COURSE DESCRIPTION CARD - SYLLABUS

Course name
IT Systems Transition [S1IZarz1>WSI]

Course

Field of study
Engineering Management

Year/Semester
3/6

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
15

Laboratory classes
0

Other
0

Tutorials
15

Projects/seminars
0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

Knowledge of the basics of management, organization science and the basics of computer science and information systems, especially database systems. Group work, interest in IT techniques

Course objective

Understand the role of IT systems in an enterprise. To familiarize students with the stages of implementing IT systems and selected methodologies.

Course-related learning outcomes

Knowledge:
The student explains basic concepts related to the design and implementation of information systems, including meta-stages of implementation and technical and organizational barriers [P6S_WG_08].
The student identifies and characterizes various stages of information systems implementation according to APICS and different IT implementation strategies [P6S_WG_13].
The student describes the model of the information systems design process and characterizes selected implementation methods, including the Prince2 method [P6S_WG_15].

Skills:
The student plans and conducts computer simulations related to the implementation of information systems, interpreting the results obtained and drawing conclusions [P6S_UW_09].
The student analyzes systemic, socio-technical, organizational, and economic aspects of the information systems implementation process, applying the knowledge gained to solve practical problems [P6S_UW_11].
The student performs a preliminary economic analysis of planned activities in the field of information systems implementation, assessing their profitability and efficiency [P6S_UW_12].

Social competences:
The student demonstrates an awareness of the importance of a systemic approach in the implementation of information systems, considering technical, economic, marketing, legal, organizational, and financial aspects [P6S_KO_02].
The student appreciates the non-technical aspects and consequences of implementing information systems, including their impact on the environment and society, and is aware of the responsibility associated with the decisions made [P6S_KR_01].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The lecture grade is based on the percentage of the colloquium. Questions and tasks checking understanding of the issues. Passing threshold - 50%.
Exercise grade is the average of individual tasks performed during classes. The assessment takes into account the correctness and completeness of the results obtained.

Programme content

Basic concepts related to the design and implementation of information systems. Meta stages of IT implementation. Barriers and technical and organizational difficulties of implementation. Implementation stages according to APICS. IT implementation strategies. IT system planning process. Model of the design process. Characteristics of selected implementation methods. A detailed discussion of the Prince2 methodology. Practical use of knowledge related to the design and implementation of information systems. Planning the IT system implementation process.

Course topics

Lecture: System implementation stages, implementation challenges, key success factors, new trends in IT systems, how to avoid mistakes, and the role of the implementation team.
Exercises: Developing a project for the evaluation, selection, and implementation of an IT system.

Teaching methods

Lectures: informative lecture, problem lecture, seminar lecture, case method.
Laboratories: laboratory (experiment) method, workshop method.

Bibliography

Basic:
Wachnik B.,Wdrażanie systemów informatycznych wspomagających zarządzanie, Polskie Wydawnictwo Ekonomiczne, Warszawa, 2016.
Banaszak Z., Kłos S., Mleczko J. Zintegrowane systemy zarządzania, Polskie Wydawnictwo Ekonomiczne, Warszawa, 2016.
Chomuszko M., System ERP dobre praktyki wdrożeń, PWN, Warszawa, 2016.
Klimek M., Toruński J. Zintegrowane informatyczne systemy zarządzania w przedsiębiorstwach produkcyjnych Integrated information management systems in manufacturing companies Zeszyty Naukowe Uniwersytetu Przyrodniczo- Humanistycznego w Siedlcach, 2013, Nr 96, s. 39-47.
Lech P., Zintegrowane systemy zarządzania ERP/ERP II. Wykorzystanie w biznesie, wdrażanie Difin, Warszawa, 2003.
Szyjewski Z., Metodyki zarządzania projektami informatycznymi. Placet, Warszawa, 2004.

Additional:

Ejdys J., Kobylińska U., Lulewicz-Sas A. (2012), Zintegrowane systemy zarządzania jakością, środowiskiem
i bezpieczeństwem pracy Oficyna Wydawnicza Politechniki Białostockiej, Białystok
Klonowski Z., Systemy informatyczne zarządzania przedsiębiorstwem. Modele rozwoju i właściwości funkcjonalne. PW, Wrocław, 2004.
Sommerville I., Inżynieria Oprogramowania, Wyd. WNT 2006.

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00