STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Designing of logistics systems & processes		**1011105411011117636**
Field of study	Profile of study (general academic, practical)	Year /Semester
Logistics - Part-time studies - Second-cycle	**(brak)**	**1 / 1**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
Corporate Logistics	**Polish**	**obligatory**
Cycle of study:	Form of study (full-time,part-time)	
Second-cycle studies	**part-time**	

No. of hours					No. of credits
Lecture: **16**	Classes: **-**	Laboratory: **14**	Project/seminars: **-**		**4**

Status of the course in the study program (Basic, major, other)	(university-wide, from another field)
(brak)	**(brak)**

Education areas and fields of science and art	ECTS distribution (number and %)

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Student has knowledge of the use in the design of logistics processes enterprise integration methods, simulation technology, methods to streamline and improve the process, is aware of the available simulation packages, knows the concepts of verification processes using simulation experiments, has knowledge of the methods and techniques of process improvement
2	**Skills**	Student is able to assess the level of maturity of the business process, is able to analyze and assess the scope and need for the use of simulation techniques in the design of logistics processes and to interpret and verify the results obtained from the simulation process
3	**Social competencies**	Student is aware of the consequences of their decisions and is prepared to take on social responsibility for decisions

Assumptions and objectives of the course:

-acquisition of skills and competences in the field of enterprise logistics system design, understanding the basic methods used in the design of logistic systems, business process design and management

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. Student can identify a specific problem belonging to the area of the design of logistics processes - [K2A_W09]
2. Understanding of process mapping and process orientation in logistics - [K2A_W10]
3. Student knows the systems and their basic functions used in the design process of logistics systems - [K2A_W12]
4. Student knows the trends in the development of the logistics process simulation tools - [K2A_W16]
5. Basic knowledge of the life cycle of machinery, socio-technical systems, industrial products - [K2A_W19]
6. Student knows the basic methods, techniques, depending on the applicable in solving complex engineering tasks in the field of logistics and know how to explain them - [K2A_W13]

Skills:

1. Able to independently develop a given problem in the design of logistics processes - [K2A_U11]
2. Can design an experiment for the given problem in the field of logistics and related areas, interpret the results and draw conclusions - [K2A_U08]
3. Can design a process to analyze, formulate a research task, propose the use of the latest technological advances and technology for the design - [K2A_U19]
4. Can design using appropriate methods and techniques of the system and the logistical process - [K2A_U09]
5. Can formulate and solve problems through multi-disciplinary integration of knowledge in the fields and disciplines used in the design of logistic systems - [K2A_U10]

Social competencies:
1. Has a sense of responsibility for their own work and the willingness to comply with the rules work in a team and to take responsibility for collaborative tasks - [K2A_K03]
2. Can see depending on cause and effect in achieving the set goals and achieve graduation importance of alternative or competing tasks - [K2A_K04]

Assessment methods of study outcomes
Examination + Credit simulation project performed in the laboratory

Course description
Logistics-System approach. Design of the logistics system. The methods used in the design of logistic systems. Orientation functional and process in business management. Process approach in logistics. Models and standardization of processes. Process mapping. Designing and implementing process changes. The implementation of the process approach in the company. Forms of organization of the process in the company. Methodology for process management. Attributes (parameters) of the process, measures of process in the context of enterprise logistics system and supply chain processes meters based process management. The life cycle of the process. Execution and financial aspects - management objectives, resource efficiency. Measuring the effectiveness and efficiency. Simulation and optimization.

Basic bibliography:

1. Procesy i projekty logistyczne, S. Nowosielski, Uniwersytet Ekonomiczny, Wrocław 2008
2. Reengineering, Reformowanie procesów biznesowych i produkcyjnych w przedsiębiorstwie, L. Pacholski, W. Cempel, P. Pawlewski, Politechnika Poznańska, Poznań 2009
3. Organizacja procesowa, P.Grajewski, PWE, Warszawa 2007
4. Modele referencyjne w zarządzaniu procesami biznesu, Difin, Warszawa 2007
5. Teoria i inżynieria systemów, Cz. Cempel, Instytut Technologii Eksploatacji - PIB/2008
6. Projektowanie Systemów I Procesów Logistycznych, P.Pawlewski, Skrypt (maszynopis) Poznan 2012

Additional bibliography:

1. Zarządzanie logistyczne, J. Coyle, E. Bard, J. Langley, PWE, 2002
2. Systemy logistyczne, H. C. Pfohl, Wyd. ILiM, Poznań, 2001
3. Wprowadzenie do zarządzania operacjami i łańcuchem dostaw, C.Bozarth, R.B.Handfield, Helion, Gliwice 2007
4. Supply Chain Management An introduction to Logistics, D.Waters, Palgrave Macmilian 2009

Result of average student's workload

Activity	**Time (working hours)**

Student's workload

Source of workload	**hours**	**ECTS**
Total workload	100	4
Contact hours	75	3
Practical activities	30	2