

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Traditional and modern production systems		Code 1011105411011117644
Field of study Logistics - Part-time studies - Second-cycle	Profile of study (general academic, practical) general academic	Year /Semester 1 / 1
Elective path/specialty Corporate Logistics	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: Second-cycle studies	Form of study (full-time,part-time) part-time	
No. of hours Lecture: 16 Classes: - Laboratory: - Project/seminars: 16		No. of credits 5
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 5 100% 5 100%
Responsible for subject / lecturer: dr hab. Inż. Marek Fertsch, prof.nadzw. email: marek.fertsch@put.poznan.pl tel. 061 665 3416 Wydział Inżynierii Zarządzania ul. Strzelecka 11, 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has knowledge on production management
2	Skills	Student has skills in production management
3	Social competencies	Student has social competences within production management
Assumptions and objectives of the course: Providing student with knowledge, skills, competences within design of traditional and contemporary production units area		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Student is able to identify interdependencies and relations within area of production management and their connection to Logistics - [[K2A_W02]]		
2. Student knows basic relations between technical and economic sphere typical for production management - [[K2A_W04]]		
3. Student knows basic terms and definitions typical for production management - [[K2A_W09]]		
4. Student is familiar with process mapping idea and generally process approach - [[K2A_W10]]		
5. Student is familiar with IT systems applicable in production management area - [[K2A_W12]]		
6. Student is able to identify and explain methods, tools and means applicable in production management area - [[K2A_W13]]		
Skills:		

<p>1. Student is able to communicate with proper means in professional environment and other environments connected with production management area - [[K2A_U04]]</p> <p>2. Student is able to develop and present in Polish or in foreign language analysis of a given problem within production management area - [[K2A_U04]]</p> <p>3. Student is able to benefit from self-learning - [[K2A_U05]]</p> <p>4. Student is able to define and solve problem integrating interdisciplinary knowledge from the disciplines within logistics - [[K2A_U10]]</p> <p>5. Student is able to assess potential of new solutions (technics and technologies) within logistics and connected areas - [[K2A_U12]]</p> <p>6. Student is able to identify areas for improvement within Logistics system - [[K2A_U16]]</p>
<p>Social competencies:</p> <p>1. Student is aware of responsibility for own work and ready to obey team work principles, including sharing responsibility for group tasks - [[K2A_K03]]</p> <p>2. Student is able to identify interdependencies and cause-effect relations in striving for goals and prioritize tasks - [[K2A_K04]]</p>

Assessment methods of study outcomes		
<p>Forming assessment</p> <p>a) project ? discussion on solution, students developed in their project, b) answering questions discussed during lecture and referring to issues presented</p> <p>Final assessment</p> <p>project a) public presentation of project outcomes and discussion on solutions developed b) quality of project developed</p> <p>lecture: presentation of analysis of a problem defined by the coordinator, answering questions concerning subject content</p>		
Course description		
<p>Revision on typical methods and technics of production systems design applicable for designing classic (traditional) production systems, including balancing methods and classical classification of production units according to euro-american approach. Presentation of JIT based methods of production systems design, leand oriented design and agile manufacturing units design.</p>		
<p>Basic bibliography:</p> <p>1. Fertsch M., Pawlak N., Stachowiak A., Współczesne systemy produkcyjne, Wydawnictwo Politechniki Poznańskiej, 2011</p> <p>2. Golińska P., Tradycyjne i nowoczesne systemy produkcyjne, Wydawnictwo Politechniki Poznańskiej, 2011</p>		
<p>Additional bibliography:</p>		
Result of average student's workload		
Activity	Time (working hours)	
1. lectures	30	
2. project	30	
3. consultation	10	
4. home work	5	
Student's workload		
Source of workload	hours	ECTS
Total workload	87	5
Contact hours	52	3
Practical activities	36	2