

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Traditional and modern production systems		Code 1011105311011117644
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>Teaching methods: conventional specialist lecture, team project, work with literature.</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>3. Fertsch M., Pawlak N., Stachowiak A., Współczesne systemy produkcyjne, Wydawnictwo Politechniki Poznańskiej, 2011</p> <p>4. Golińska P., Tradycyjne i nowoczesne systemy produkcyjne, Wydawnictwo Politechniki Poznańskiej, 2011</p> <p>5. Brzeziński M., Organizacja i sterowanie produkcją. Projektowanie systemów produkcyjnych i procesów sterowania produkcją, Agencja Wydawnicza Placet, Warszawa 2002.</p> <p>6. Mazurczak J., Projektowanie struktur systemów produkcyjnych, Wydawnictwo Politechniki Poznańskiej, 2002</p>		
<p>Additional bibliography:</p> <p>1. Boszko J. Struktura organizacyjna przedsiębiorstwa i drogi jej optymalizacji, WNT, Warszawa 1973</p> <p>2. Lis. S., Podstawy projektowania systemu rytmicznej produkcji, PWN, Warszawa, 1973</p>		
Result of average student's workload		
Activity	Time (working hours)	
1. lectures	16	
2. project	16	
3. consultation	32	
4. home work	32	
5. work in groups	29	
Student's workload		
Source of workload	hours	ECTS
Total workload	125	5
Contact hours	57	3
Practical activities	51	2