

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Process - Product Integration		Code 1011101341011117816
Field of study Logistics - Full-time studies - First-cycle studies	Profile of study (general academic, practical) general academic	Year /Semester 2 / 4
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 15 Classes: - Laboratory: - Project/seminars: 15		No. of credits 2
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		ECTS distribution (number and %) 2 100%
Responsible for subject / lecturer: dr hab. inż. Paweł Pawlewski email: pawel.pawlewski@put.poznan.pl tel. 61 6653413 Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań		Responsible for subject / lecturer: dr hab. inż. Paweł Pawlewski email: pawel.pawlewski@put.poznan.pl tel. 61 6653413 Faculty of Engineering Management ul. Strzelecka 11 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic knowledge of manufacturing, logistics, economics
2	Skills	Student has the ability to associate and interpret the phenomena occurring in the enterprise
3	Social competencies	Student is aware of the consequences of the decisions
Assumptions and objectives of the course:		
- Analysis of the paradigms of production from the point of view of technical and business - Show the need for integration between engineering and business		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Can define the content and scope of the integration process and product - [K1A_W16] 2. Can point out the basic formulas applicable in the area of integration of product and process - [K1A_W14] 3. Can explain in detail specific concepts for the integration of process and product - [K1A_W17] 4. Has a basic knowledge of the life cycle of socio-technical systems in the context of the integration process and product - [K1A_W21] 5. Has a basic knowledge of the life cycle of industrial products - [K1A_W22]		
Skills:		
1. Can design a process analysis for the integration of product and process - [K1A_U05] 2. Can present with appropriate personal problem with the product lifecycle - [K1A_U02] 3. Able to prepare and present an oral presentation concerning the specific issues of logistics in Polish and foreign language - [K1A_U03] 4. Able to independently develop a given issue, which forms part of this item - [K1A_U05] 5. It can make a critical analysis of the phenomenon of falling within the integra process and product [- [K1A_U13]		
Social competencies:		

1. Student is sensitive to the non-technical aspects and effects of engineering activities, including its impact on the environment, and the related responsibility for decisions - [K1A_K02]
2. Student is willing to cooperate and work in teams to resolve problems - [K1A_K03]
3. Able to plan and manage in an entrepreneurial - [K1A_K06]

Assessment methods of study outcomes		
-Assessment of the project, colloquia		
Course description		
- manufacturing paradigms - mass production. production of		
Basic bibliography:		
1. Projektowanie produktu, Richard Morris, PWN, Warszawa, 2009		
2. Nowoczesne wzornictwo od A do Z Nowoczesne wzornictwo od A do Z, Wydawnictwo Olesiejuk, 2010		
3. Inżynieria zarządzania część 1, Ireneusz Durlik, Placet, 2007		
4. The Global Manufacturing revolution, Yoram Koren, Wiley		
Additional bibliography:		
1. Prawdziwe historie nowych produktów, Robert J. Thomas, Prószyński i S-ka, 2001		
2. Steve Jobs, Walter Isaacson, Insignis Media , 2011		
Result of average student's workload		
Activity	Time (working hours)	
1. Lectures	15	
2. Project	15	
3. Consultation	10	
4. Literature studying	15	
Student's workload		
Source of workload	hours	ECTS
Total workload	55	2
Contact hours	40	1
Practical activities	15	1