

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Process - Product Integration</b>		Code <b>1011101441011117816</b>
Field of study <b>Logistics - Full-time studies - First-cycle studies</b>	Profile of study (general academic, practical) <b>general academic</b>	Year /Semester <b>2 / 4</b>
Elective path/specialty <b>-</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>elective</b>
Cycle of study: <b>First-cycle studies</b>	Form of study (full-time, part-time) <b>full-time</b>	
No. of hours Lecture: <b>15</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>15</b>		No. of credits <b>2</b>
Status of the course in the study program (Basic, major, other) <b>other</b>		(university-wide, from another field) <b>university-wide</b>
Education areas and fields of science and art <b>technical sciences</b>		ECTS distribution (number and %) <b>2 100%</b>
<b>Responsible for subject / lecturer:</b> dr hab. inż. Paweł Pawlewski email: pawel.pawlewski@put.poznan.pl tel. 61 6653413 Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań		<b>Responsible for subject / lecturer:</b> dr hab. inż. Paweł Pawlewski email: pawel.pawlewski@put.poznan.pl tel. 61 6653413 Faculty of Engineering Management ul. Strzelecka 11 60-965 Poznań
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Basic knowledge of manufacturing, logistics, economics
2	<b>Skills</b>	Student has the ability to associate and interpret the phenomena occurring in the enterprise
3	<b>Social competencies</b>	Student is aware of the consequences of the decisions
<b>Assumptions and objectives of the course:</b> - Analysis of the paradigms of production from the point of view of technical and business - Show the need for integration between engineering and business		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Basic knowledge of: engineering graphics; construction and technology and construction and operation of machinery - [K1A_W05]		
2. Can point out the basic formulas applicable in the area of integration of product and process - [K1A_W14]		
3. can explain basic concepts for logistics and its specific issues (inventory management, distribution logistics, production and supply logistics, operations logistics, environmental management) and supply chain management - [K1A_W15]		
4. Can define the content and scope of the integration process and product - [K1A_W17]		
5. Can explain in detail specific concepts for the integration of process and product - [K1A_W18]		
6. It can characterize best practices in logistics and its specific issues (inventory management, distribution logistics, production and supply logistics, logistics operations, ecology) and supply chain management of the phenomenon - [K1A_W20]		
7. Has a basic knowledge of the life cycle of socio-technical systems in the context of the integration process and product - [K1A_W21]		
8. Has a basic knowledge of the life cycle of industrial products - [K1A_W22]		
<b>Skills:</b>		

<p>1. It can search on the literature of the subject and other sources and in an orderly way present information about the problem within the logistics and its specific issues (inventory management, distribution logistics, production and supply logistics, logistics operations, ecology) and supply chain management - [K1A_U01]</p> <p>2. Can present with appropriate personal problem with the product lifecycle - [K1A_U02]</p> <p>3. Able to prepare and present an oral presentation concerning the specific issues of logistics in Polish and foreign language - [K1A_U03]</p> <p>4. Can design a process analysis for the integration of product and process - [K1A_U04]</p> <p>5. Able to independently develop a given issue, which forms part of this item - [K1A_U05]</p> <p>6. Can formulate with analytical, simulation or experimental methods within the studied subject the design task and solve this task in the field of logistics and its specific issues (inventory management, distribution logistics, production and supply logistics, operation logistics, environmental management) and supply chain management - [K1A_U09]</p> <p>7. It can assess the economic issues of the chosen problem within the framework of logistics and its specific issues (inventory management, distribution logistics, production and supply logistics, operations logistics, environmental management) and supply chain management - [K1A_U12]</p> <p>8. It can make a critical analysis of the phenomenon of falling within the integra process and product [ - [K1A_U13]</p> <p>9. Can design, using appropriate methods and techniques, an object, system or process that meets the requirements of logistics and its specific issues (inventory management, distribution logistics, production and supply logistics, operations logistics, environmental management) and supply chain management - [K1A_U16]</p>
<p><b>Social competencies:</b></p> <p>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]</p> <p>2. Student is willing to cooperate and work in teams to resolve problems - [K1A_K03]</p> <p>3. Able to plan and manage in an entrepreneurial - [K1A_K06]</p> <p>4. familiarize with typical engineering technologies in the area of logistics and its specific issues (inventory management, distribution logistics, production and supply logistics, operation logistics, environmental management) and supply chain management; among others such as: balance sheet method, supply cycle accounting methods in supply, production and distribution - [KlnzA_W05]</p>

<b>Assessment methods of study outcomes</b>		
-Assessment of the project, colloquia		
<b>Course description</b>		
- manufacturing paradigms - mass production. production of		
<b>Basic bibliography:</b>		
<p>1. Projektowanie produktu, Richard Morris, PWN, Warszawa, 2009</p> <p>2. Nowoczesne wzornictwo od A do Z Nowoczesne wzornictwo od A do Z, Wydawnictwo Olesiejuk, 2010</p> <p>3. Inżynieria zarządzania część 1, Ireneusz Durlik, Placet, 2007</p> <p>4. The Global Manufacturing revolution, Yoram Koren, Wiley</p>		
<b>Additional bibliography:</b>		
<p>1. Prawdziwe historie nowych produktów, Robert J. Thomas, Prószyński i S-ka, 2001</p> <p>2. Steve Jobs, Walter Isaacson, Insignis Media , 2011</p>		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. Lecture	15	
2. Laboratory	15	
3. Consulting	5	
4. preparation for classes	10	
5. independent student work	20	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	65	2
Contact hours	35	0
Practical activities	15	0