

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>(-)</b>		Code <b>1011101341011119862</b>
Field of study <b>Logistics - Full-time studies - First-cycle studies</b>	Profile of study (general academic, practical) <b>(brak)</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>5</b>
Status of the course in the study program (Basic, major, other) <b>(brak)</b>		(university-wide, from another field) <b>(brak)</b>
Education areas and fields of science and art		ECTS distribution (number and %)
<b>Responsible for subject / lecturer:</b>  dr hab. inż. Łukasz Hadaś email: lukasz.hadas@put.poznan.pl tel. 61 665 34 01 Wydział Inżynierii Zarządzania ul. Strzelecka 11, 60-965 Poznań		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	The student has knowledge of the subject of logistics.
2	<b>Skills</b>	The student has the skills in the subject of logistics.
3	<b>Social competencies</b>	The student has social competences in the field of logistics.
<b>Assumptions and objectives of the course:</b> Mastering the knowledge, skills and social competences associated with the applications of logistic engineering by the student.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b> 1. knows the basic relationships characteristic for the applications of logistic engineering (T1A_W03) - [K1A_W14] 2. can recognize the basic phenomena characteristic for the functioning of logistic engineering applications - [K1A_W16] 3. interprets the phenomena characteristic for the functioning of logistic engineering applications - [K1A_W17]		
<b>Skills:</b> 1. He knows how to conduct the process of needs analysis in logistic engineering applications - [K1A_U14] 2. He knows how to choose the right tools and methods of analysis and design for logistic engineering applications - [K1A_U15] 3. Can design a logistics system using the right methods and techniques using logistic engineering - [K1A_U16]		
<b>Social competencies:</b> 1. The student is sensitive to non-technical aspects and effects of engineering activities, including its impact on the environment of the logistics system (T1A_KO2) - [K1A_K02] 2. Responsible for correct identification and resolution of dilemmas related to the functioning of the logistics system - [K1A_K07] 3. The student is able to plan and manage in an entrepreneurial manner as part of a logistics system - [K1A_K06]		
<b>Assessment methods of study outcomes</b>		

<p>Forming rating</p> <p>a) project - based on a discussion on solutions that he wants to propose as part of the project</p> <p>b) the lecture based on the answers to questions about the material discussed in the previous lecture</p> <p>Summary rating</p> <p>in the scope of the project</p> <p>a) on the basis of a public presentation of the project results and discussions on them,</p> <p>b) on the basis of the substantive quality of the prepared project</p> <p>in the lecture-based on the pass (exam)</p>		
<b>Course description</b>		
<p>Logistics systems. Logistics processes. Logistic system and logistics process as a subject of design. The stages of logistics development. A place of logistic engineering in the development of logistics. Methodological basis of logistic engineering. Planning in logistics. Information exchange in logistic systems.</p> <p>Teaching methods:</p> <p>conventional monographic lecture,</p> <p>project: team project, work with literature</p>		
<b>Basic bibliography:</b>		
<p>1. Blanchard B., Logistics engineering and management, Prentice-Hall, Inc., Englewood Cliffs, New Jersey 1992</p> <p>2. Fertsch M. (red.), Elementy inżynierii logistycznej, Wydawnictwo ILiM, Poznań, 2017</p> <p>3. Blanchard B.S., Logistics as an Integrating System&amp;#38;#39;s Function, [in:] Don Taylor G. (red.), Introduction to Logistics Engineering, CRC Press, Boca Raton, FL, 2009</p> <p>4. Coyle J.L., Bardi E. J., Langley C.J.Jr., Zarządzanie logistyczne, Polskie Wydawnictwo Ekonomiczne, Warszawa, 2002</p>		
<b>Additional bibliography:</b>		
<p>1. Pfohl H.- Ch., Systemy logistyczne. Podstawy organizacji i zarządzania. Wydawnictwo ILiM, Poznań, 2002.</p> <p>2. Don Taylor G., Introduction to logistics Engineering, CRC Press, Taylor&amp;#38;#38; Francis Group, Boca Raton, London, New York, 2009</p>		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. Lectures	15	
2. Project	15	
3. Consultation	25	
4. Own work	30	
5. The exam	5	
6. Literature studying	20	
7. Preparation to the classes	15	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	125	5
Contact hours	60	2
Practical activities	15	1