

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Transportation management		Code 1011101421011102816
Field of study Logistics - Full-time studies - First-cycle studies	Profile of study (general academic, practical) (brak)	Year /Semester 1 / 2
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 30 Classes: 15 Laboratory: - Project/seminars: -		No. of credits 5
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
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 inż. Mirosław Kruszyński email: miroslaw.kruszynski@put.poznan.pl tel. - 61 665 Faculty of Engineering Management Poznan University of Technology, 11 Strzelecka street, 60-965 Poznan, Poland		Responsible for subject / lecturer: dr inż. Mirosław Kruszyński email: miroslaw.kruszynski@put.poznan.pl tel. - 61 665 Faculty of Engineering Management Poznan University of Technology, 11 Strzelecka street, 60-965 Poznan, Poland
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The student she/he has a basic knowledge of economics and transportation. It has a general knowledge of transportation operations and management (T1A_W02).
2	Skills	The student she/he has the ability to self-education (T1A_U05). The student she/he can use to formulate and solve engineering tasks analytical methods, simulation and experimental (T1A_U09). She / he can make an initial economic analysis undertaken activities engineering (T1A_U12). Also, she / he can assess the usefulness of routine methods and tools to solve simple engineering tasks of a practical nature, characteristic of the studied field of study and to select and apply the correct method and tools (T1A_U15).
3	Social competencies	The student she/he is aware of and understands the validity of non-technical aspects and impact of engineering activities, including its impact on the environment, and the related responsibility for decisions (T1A_K02). The student she/he can interact and work in a group, assuming different roles in it (T1A_K03). The student she/he is able to think and act in an entrepreneurial (T1A_K06).
Assumptions and objectives of the course: -An indication of the fundamental problems in transportation and ability to optimize selected processes in the field of transport work.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. has a basic knowledge of IT (information technology), economics and organization of transport, production management and services, design of production systems (plant design) (T1A_W02) - [-[K1A_W09]]		
2. have basic knowledge about the relationship between the sphere of technical and economic characteristic of the logistics and supply chain management (T1A_W08). - [-[K1A_W10]]		
Skills:		

<p>1. can independently develop given, located within the subject being studied issue (T1A_U05), - [K1A_U05]]</p> <p>2. can be formulated using analytical methods, simulation or experimental falling within the subject being studied design task and to solve them in terms of logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management supplies (T1A_U09), - [K1A_U09]]</p> <p>3. is able to assess in economic terms specific problem, which forms part of the logistics and the specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management (T1A_U12), - [K1A_U12]]</p> <p>4. is able to select the right tools and methods to solve the problem located within the logistics and supply chain management and to effectively use them (T1A_U15). - [K1A_U15]]</p>
<p>Social competencies:</p> <p>1. is sensitive to non-technical aspects and effects of engineering activities, including its impact on the environment, and the related responsibility for decisions in the field coming within the logistics and supply chain management (T1A_KO2), - [K1A_K02]]</p> <p>2. is willing to cooperate and work in groups on solving falling within the subject being studied problems (T1A_KO3), - [K1A_K03]]</p> <p>3. can plan and manage in an entrepreneurial (T1A_KO6). - [K1A_K06]]</p>

Assessment methods of study outcomes		
-Multiple choice test and a multimedia presentation of the individual.		
Course description		
-The course covers the following topics: transport economics in place the system of sciences, the market of transport services, the characteristics of modes of transport, infrastructure and transport suprastructure, prices, tariffs, taxes and fees for transport activities, analysis and evaluation methods of transport processes, areas of operation and location of transport centers , the cost of transport activity.		
Basic bibliography:		
<p>1. Ekonomika transportu, Marek Ciesielski, Anna Szudrowicz, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk, 2008</p> <p>2. Ekonomika transportu dla potrzeb logistyki. Teoria i praktyka, Adam Szymonik, Diffin, Warszawa, 2013</p> <p>3. Ekonomika transportu. Teoria i praktyka gospodarcza, Aleksandra Koźlak, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk, 2008.</p>		
Additional bibliography:		
<p>1. Transport miejski. Ekonomika i organizacja, Olgierd Wyszomirski, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk, 2008</p> <p>2. Uwarunkowania rozwoju systemu transportowego Polski, Bogusław Liberacki, Leszek Mindura, Wydawnictwo Instytutu Technologii Eksploatacji - PIB, Warszawa - Radom, 2007</p> <p>3. Wielokryterialne wspomaganie decyzji w transporcie drogowym, Jacek Żak, Wydawnictwo Politechniki Poznańskiej, Poznań, 2005</p> <p>4. Ekonomika transportu, Edward Mendyk, Wydawnictwo Wyższej Szkoły Logistycznej w Poznaniu, Poznań, 2009.</p> <p>5. Transport, Włodzinierz Rydzkowski, Krystyna Wojewódzka-Król red., Wydawnictwo Naukowe PWN, Warszawa, 2009.</p> <p>6. Ekonomika Logistyki, Teresa Truś, Wydawnictwo Difin, 2010.</p>		
Result of average student's workload		
Activity	Time (working hours)	
1. lecture	30	
2. exercise	15	
3. consultations	30	
4. exam	5	
5. The student	30	
Student's workload		
Source of workload	hours	ECTS
Total workload	110	5
Contact hours	75	4
Practical activities	15	1