

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Means of Long-Distance Transport</b>		Code <b>1010601321010611301</b>
Field of study <b>Transport</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>1 / 2</b>
Elective path/specialty <b>-</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</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>2</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>		No. of credits <b>2</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 <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>2 100%</b> <b>2 100%</b>
<b>Responsible for subject / lecturer:</b> dr inż. Andrzej Wołyński email: andrzej.wolynski@put.poznan.pl tel. (61) 665 22 36 Wydział Inżynierii Transportu ul. Piotrowo 3, 60-965 Poznań		<b>Responsible for subject / lecturer:</b> dr inż. Grzegorz Gramza email: grzegorz.gramza@put.poznan.pl tel. (61) 665 20 17 Wydział Inżynierii Transportu ul. Piotrowo 3, 60-965 Poznań
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	The student has a basic knowledge of general education
2	<b>Skills</b>	Student is able to use the acquired knowledge to the analysis of specific phenomena and processes in motion objects. The student is able to solve specific problems arising in technical systems.
3	<b>Social competencies</b>	Student is able to prioritize important in solving the tasks posed in front of him. Student demonstrates self-reliance in solving problems, acquire and improve their knowledge and skills.
<b>Assumptions and objectives of the course:</b> The aim of the course is to acquaint students with the broad issues of different modes of transport		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b> 1. has a structured, theoretically founded general knowledge in the field of technology, transport systems and various means of transport - [T1A_W03] 2. has knowledge of important directions of development and the most important technical achievements and other related scientific disciplines, in particular transport engineering - [T1A_W05]		
<b>Skills:</b> 1. can see in the process of formulating and solving tasks in the field of transport engineering also non-transport aspects, in particular social, legal and economic issues - [T1A_U05]		
<b>Social competencies:</b> 1. understands that in technology, knowledge and skills quickly become obsolete - [T1A_K01]		
<b>Assessment methods of study outcomes</b>		
Final test of the lectures		
<b>Course description</b>		

<p>Subject is divided into 4 parts:</p> <ul style="list-style-type: none"> <li>- Road transport,</li> <li>- Maritime transport,</li> <li>- Transport by rail,</li> <li>- Air transport.</li> </ul> <p>Basic legal requirements relating to road transport (STD) , a division of STD , STD basic systems - tasks and components . Friction vehicle - basic concepts . Traffic safety in road vehicles. Alternative sources of power .</p> <p>Basic information on the types , construction, specific features and capabilities of maritime transport for freight , passenger , mixed and special assignments.</p> <p>Basic information on the rolling stock : types of vehicles, elements of construction: wheel-rail system , body and chassis , types of traction .</p> <p>Basic information about aviation : air transport division , the types of aircraft and helicopters , lift and aerodynamics , control , drives, fleet air .</p>		
<p><b>Basic bibliography:</b></p> <p>1. Rydzkowski W., Wojewódzka-Król K. (red.): Transport. PWN, Warszawa 2009.</p>		
<p><b>Additional bibliography:</b></p> <p>1. Stajniak M. i in.: Transport i spedycja. I LiM, seria Biblioteka Logistyka, Poznań 2008.</p>		
<p><b>Result of average student's workload</b></p>		
<p><b>Activity</b></p>	<p><b>Time (working hours)</b></p>	
1. Preparation for the performance	0	
2. Participation in lectures	30	
3. Fixing the contents of the lectures	10	
4. Consultations	2	
5. Exam preparation	10	
6. Participation in the exam	2	
<p><b>Student's workload</b></p>		
<p><b>Source of workload</b></p>	<p><b>hours</b></p>	<p><b>ECTS</b></p>
Total workload	54	2
Contact hours	34	1
Practical activities	0	0