

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Public Transportation		Code 1010612321010612257
Field of study Transport	Profile of study (general academic, practical) (brak)	Year /Semester 1 / 2
Elective path/specialty Road Transport	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 2 Classes: - Laboratory: - Project/seminars: -		No. of credits 2
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 %) 2 100% 2 100%
Responsible for subject / lecturer: dr inż. Marcin Kiciński email: marcin.kicinski[at]put.poznan.pl tel. 61 665 21 29 Wydział Inżynierii Transportu ul. Piotrowo 3 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has basic knowledge concerning transportation systems and processes. He/she acquired knowledge about different transportation modes.
2	Skills	Student can analyze and evaluate transportation systems; understands the phenomena taking place in there systems and can interpret them. Student is able to classify transport.
3	Social competencies	Student is aware of the role and importance of public transportation.
Assumptions and objectives of the course: Getting student acquainted with the notion of public transportation processes and phenomena associated with it; presenting rules and standards of public transportation operations in the world; evaluation of public transportation systems.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Student knows the notion/definition, scope and operational rules of public transportation. - [T2A_W01, T2A_W03, T2A_W09]		
2. Knows the history and evolution of technical and organizational solutions applied in public transportation around the world - [T2A_W01, T2A_W03, T2A_W09]		
3. Knows and understands phenomena associated in public passengers transportation - [T2A_W01, T2A_W03, T2A_W09]		
4. Knows the standards of public transportation, operations and indicators of its efficiency. - [T2A_W01, T2A_W03, T2A_W09]		
Skills:		
1. Can define and characterize public transportation. - [T2A_U01, T2A_U04, T2A_U08]		
2. Can identify phenomena and processes associated with public transportation. - [T2A_U01, T2A_U04, T2A_U08]		
3. Is able to evaluate the modernity of solutions applied in public transportation. - [T2A_U01, T2A_U04, T2A_U08]		
4. Can design the public transportation system to carry out the passengers travels (including: transport infrastructure, transportation means, human resources, organizational rules, processes.) - [T2A_U01, T2A_U04, T2A_U08]		
5. Can evaluate the system of public transportation. - [T2A_U01, T2A_U04, T2A_U08]		
6. Is able to characterize, evaluate and select transportation means for public transportation system. - [T2A_U01, T2A_U04, T2A_U08]		
Social competencies:		

1. The student is aware of the role of public transportation for the society/community. Can define its role and defend its position in the society/community - [T2A_K02]
2. Understands the essence of public passengers transportation and its interactions with freight and private - [T2A_K02]
3. Can analyze the effects of good and bad operations of public transportation. - [T2A_K02]

Assessment methods of study outcomes

Final test/exam

Course description

Introduction to public transportation - the historical review, development of local and regional public passenger. The essence and major characteristics of public transportation. The notion and characteristics of public transportation. The review of public transportation systems in the world. The quality of public transport. Evaluation indicators for public transportation (definition and presentations of basic indicators describing and evaluating public transport operations, such as: travel time, comfort of travel, cost of travel, fleet utilization, timeliness/regularity). Construction of the time tables of public transport. Designing communication network diagrams of public transport. Bus rapid transport systems (historical review and development).

Basic bibliography:

1. Ceder A.: Public Transit Planning and Operation. Theory, Modeling and Practice. Wydawnictwo Elsevier 2015
2. Grava S.: Urban Transportation Systems. Urban Transportation Systems. Choices for Communities. McGraw-Hill 2004
3. Madej B., Pruciak K., Madej R.: Publiczny transport miejski ? Zasady tworzenia rozkładów jazdy. Akademia Transportu i Przedsiębiorczości, Warszawa 2015
4. Rudnicki A.: Jakość komunikacji miejskiej. Wydawnictwo SITK, Kraków 1999
5. White P.: Public Transport: Its Planning, Management and Operation. Natural and Built Environment Series, Taylor & Francis e-Library 2008
6. Wyszomirski O. (red.): Transport miejski. Ekonomia i organizacja. Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk 2010.

Additional bibliography:

1. Iles R.: Public Transport in Developing Countries. Wydawnictwo Elsevier 2005.
2. Molecki B.: Rola samorządu w kształtowaniu transportu regionalnego w Polsce i w Europie. Oficyna Wydawnicza PWR, Wrocław 2010
3. Schöbel A.: Optimization in Public Transportation. Stop Location, Delay Management and Tariff Zone Design in a Public Transportation Network. Wydawnictwo Springer 2007
4. Wesołowski J.: Miasto w ruchu. Dobre praktyki w organizowaniu transportu miejskiego. Instytut Spraw Obywatelskich, Łódź 2008.
5. Vuchic V.R.: Urban Transit Systems and Technology. Wydawnictwo John Wiley & Sons 2007

Result of average student's workload

Activity	Time (working hours)	
1. Participation in lectures	30	
2. Learning of lectures content	6	
3. Consultations	1	
4. Preparation for the final test	10	
5. Participation in the final test	2	
Student's workload		
Source of workload	hours	ECTS
Total workload	49	2
Contact hours	33	1
Practical activities	0	0