

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Proseminar		Code 1010612221010624114
Field of study Transport	Profile of study (general academic, practical) (brak)	Year /Semester 1 / 2
Elective path/specialty Railway 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: 1 Classes: - Laboratory: - Project/seminars: -		No. of credits 1
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		ECTS distribution (number and %) 1 100%
Responsible for subject / lecturer: Prof. Franciszek Tomaszewski, DSc., DEng. email: franciszek.tomaszewski@put.poznan.pl tel. +48 (61) 665 25 70 Faculty of Working Machines and Transportation Piotrowo 3 street, 60-965 Poznan		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Students have knowledge about writing graduate works of first cycle study.
2	Skills	Students can search for information, interfere and use MS Office.
3	Social competencies	Students can carry out discussions, argue their point of view. Students are aware of necessity of further training.
Assumptions and objectives of the course: The aim of the subject is to gain knowledge and competence to solve problems realized in master theses and to present results of those works.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Students know and understand elementary terms about protection of industrial property and about copyright law. - [K1A_W20] 2. Students know principles of writing graduate works, formulating and describing research problems. - [K1A_W21] 3. Students know the scope of realization of graduate master theses. - [K1A_W21]		
Skills:		
1. Students can, using knowable methods, prepare the course of research and formulate inferences from obtained results. - [K1A_U07] 2. Students can proceed research results in a clear and comprehensible way using professional principles and terms. - [K1A_U10 K1A_U17] 3. Students can self-educate using modern didactic tools. - [K1A_U06]		
Social competencies:		
1. Students can think and act in resourceful way and make decisions. - [K1A_K07] 2. Students can define tasks and priorities of their realization. - [K1A_K05] 3. Students are aware of necessity and know possibilities of constant self-education, are aware of necessity to gain new knowledge to develop professionally. - [K1A_K01] 4. Students are aware of significance of conducting in professional way, complying with principles of professional ethics and respecting various cultures. - [K1A_K08]		

Assessment methods of study outcomes		
Credit on the basis of grade for elaborating problems of master theses and their presentation.		
Course description		
<p>General part: formulating problem presented in the master thesis, modes of its defining and possible solutions. Principles of formulating thesis of mater thesis, literature study, methodology part of the work, presentation of research and analyses results, elaboration of remarks and inferences. Principles of editing, editing aids, preparation of graphic elements and presentation of results.</p> <p>Specialist part: presenting realized analyses and problems presented in the master thesis, scope and characteristics of graduate master thesis by the authors and discussion off all participants of the seminar.</p>		
Basic bibliography:		
<ol style="list-style-type: none"> 1. Dietrich J., System i konstrukcja, WNT, Warszawa 1978 2. Orczyk J., Zarys metodyki pracy umysłowej, PWN, Warszawa 1988 3. Pieter J., Ogólna metodologia pracy naukowej, Ossolineum, Wrocław 1967 		
Additional bibliography:		
<ol style="list-style-type: none"> 1. Szkutnik Z., Metodyka pisania pracy dyplomowej, Wyd. Poznańskie, Poznań 2005 2. Tarnowski W., Podstawy projektowania technicznego, WNT, Warszawa 1997 		
Result of average student's workload		
Activity	Time (working hours)	
1. Participation in the lecture	15	
2. Consultation	1	
3. Preparation to get credit	1	
4. Participation in credit procedures	1	
Student's workload		
Source of workload	hours	ECTS
Total workload	18	1
Contact hours	17	1
Practical activities	0	0