

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Proseminar		Code 1010612221010614114
Field of study Transport	Profile of study (general academic, practical) (brak)	Year /Semester 1 / 2
Elective path/specialty Logistics of 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 Technical sciences		ECTS distribution (number and %) 1 100% 1 100%
Responsible for subject / lecturer: Jacek Żak email: jacek.zak@put.poznan.pl tel. 61 6652 230 Wydział Maszyn Roboczych i Transportu ul. Piotrowo 3 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The student has acquired an overall engineering knowledge. He is acquired with major issues associated with his/her topic/subject of the dissertation.
2	Skills	The student can use Internet. He/she can write fluently in Polish and read different texts in English. The student can formulate questions concerning his/her research topic.
3	Social competencies	The student understand the importance of further education and self-improvement. He/she can carry put scientific discussion, use scientific arguments.
Assumptions and objectives of the course: Extending student knowledge and skills in organizing and carrying out research projects and writing research reports, publications and dissertations.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. The student has knowledge concerning organization of research projects and familiar with the principles of writing and research report tasks/dissertation - [K1A_W21]		
2. He/she knows the rules of formulating research goals, tasks, hypotheses. He/she knows different scientific methods - [K1A_W24]		
3. He/she knows different sources of publications. - [K1A_W21]		
Skills:		
1. The student can organize a simple/individual research project and write a research report - [K1A_U18]		
2. He/she can formulate research goals and hypotheses. He/she can apply scientific methods concerning engineering research problems - [K1A_U02]		
3. He/she can carry out literature review based on different sources of information - [K1A_U04]		
4. - [-]		
Social competencies:		
1. The student is aware of the social role and importance of scientific research and its impact on society - [K1A_K07]		
2. He/she understands the value of results/outcomes generated in research projects. - [K1A_K02]		
3. . He/she can carry out discussions concerning research topics and use scientific arguments in different consideraions - [K1A_K05]		

Assessment methods of study outcomes		
<p>F-written tasks checking the students' abilities to construct/develop specific components of research projects: definition of schedule and budget research goal, tasks and hypotheses, application of selected scientific.</p> <p>P- practical test covering the scope of the Pre-seminar methods.</p>		
Course description		
<p>1. Organization of research projects: Basic rules concerning organization of research. Universal stages/phases of each research project.</p> <p>2. Process of writing a research report/dissertation: Description of the process of preparation and writing a scientific publication.</p> <p>3. Ethical standards in the academic world: General rules and ethical standards concerning carried out research projects and publishing their results. Legal regulations ? intellectual property right.</p> <p>4. Literature review: Analysis and characteristics of different sources of information. Major rules and characteristics of literature review.</p> <p>5. Selection of the title of dissertation: Discussion between the thematic scope of research and the title of dissertation. The rules of defining the title.</p> <p>6. The definition of research goal and tasks: Major features of research goal. The correlation between research goal and tasks. Formulation of research goals and tasks.</p> <p>7. Definition of the research hypothesis: The rules of formulation and basic characteristics of the research hypothesis. The essence of proving the research hypothesis.</p> <p>8. Classification of scientific methods: The requirements of scientific approach. Scientific methods definition, classification and application.</p>		
Basic bibliography:		
<p>1. Leszek W., Wybrane zagadnienia metodyczne badań empirycznych. Instytut Technologii Eksploatacji, Radom 2006</p> <p>2. Szubert-Zarzeczny U., Technika pisania prac o charakterze naukowym, Wyd. Wyższa Szkoła Zarządzania &#38;#34;EDUKACJA&#38;#34; Wrocław, 2001.</p>		
Additional bibliography:		
<p>1. Wojciechowska R., Przewodnik metodyczny pisania pracy dyplomowej. Wyd. DIFIN, 2010</p>		
Result of average student's workload		
Activity	Time (working hours)	
1. Preparing materials	15	
2. Consultation	10	
Student's workload		
Source of workload	hours	ECTS
Total workload	25	1
Contact hours	10	0
Practical activities	15	1