

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Diploma Seminar		Code 1010631331010630467
Field of study Transport	Profile of study (general academic, practical) general academic	Year /Semester 2 / 3
Elective path/specialty Engineering of Pipeline 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: - Classes: - Laboratory: - Project/seminars: 1		No. of credits 20
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 20 100% 20 100%
Responsible for subject / lecturer: prof. dr hab. inż. Michał Ciałkowski email: michal.cialkowski@put.poznan.pl tel. 616652205 Faculty of Working Machines and Transportation ul. Piotrowo 3 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Knowledge of issues related to the topic of the diploma [PRK6]
2	Skills	Can apply the scientific method to solve problems [PRK6]
3	Social competencies	Knows the limits of their own knowledge and skills, able to clearly formulate questions, understands the need for further education [PRK6]
Assumptions and objectives of the course: Deepening the knowledge and skills of the organization, and conduct scientific and technical presentation of the results of this work		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. has extended and in-depth knowledge of physics useful for formulating and solving selected technical tasks, in particular for correct modeling of real problems - [T2A_W02 [P7S_WG]]		
2. has a basic knowledge of patents, copyright and related rights law and the law on personal data protection and technology transfer in particular with regard to transport solutions - [T2A_W11 [P7S_WK]]		
Skills:		
1. is able to obtain information from various sources, including literature and databases, both in Polish and in English, appropriate to integrate them, make their interpretation and critical evaluation, draw conclusions, and fully justify the opinions they - [T2A_U01 [P7S_UW]]		
2. can properly plan and perform experiments, including measurements and computer simulations, interpret the obtained results, and correctly draw conclusions from them - [T2A_U03 [P7S_UW]]		
3. can properly plan and perform experiments, including measurements and computer simulations, interpret the obtained results, and correctly draw conclusions from them - [T2A_U15 [P7S_UK]]		
4. can organize, interact and work in a group, assuming different roles in it and is able to properly define the priorities for the implementation of tasks set by himself or others - [T2A_U18 [P7S_UO]]		
Social competencies:		

1. understands that in technology, knowledge and skills quickly become obsolete - [T2A_K01 [P7S_KK]]
2. is aware of the importance of knowledge in solving engineering problems and knows examples and understands the reasons for malfunctioning transport systems that led to serious financial and social losses or to serious health and even life - [T2A_K02 [P7S_KK]]
3. can think and act in an entrepreneurial way, including finding commercial applications for the system being created, bearing in mind not only business but also social benefits of the business - [T2A_K03 [P7S_KO]]

Assessment methods of study outcomes		
Final test		
Course description		
<p>General part: types of work eligibility, including graduate and rules for their implementation, requirements for graduation work. The formulation of a technical problem and also work, literature study, some methodological work, the presentation of research results, develop insights and conclusions. Rules editing work, assisted editing, graphics development, job preparation for printing and reproduction.</p> <p>Some specialist: reporting to the ongoing work by the authors thesis and discussion of them.</p>		
Basic bibliography:		
Additional bibliography:		
Result of average student's workload		
Activity	Time (working hours)	
1. Write paper work	350	
2. Consultation	30	
Student's workload		
Source of workload	hours	ECTS
Total workload	380	20
Contact hours	30	2
Practical activities	350	18