

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Passing Project</b>		Code <b>1010631261010634451</b>
Field of study <b>Transport</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>3 / 6</b>
Elective path/specialty <b>Engineering of Pipeline Transport</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: - Classes: - Laboratory: - Project/seminars: <b>4</b>		No. of credits <b>6</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>		ECTS distribution (number and %) <b>6 100%</b>
<b>Responsible for subject / lecturer:</b> prof. dr hab. inż. Michał Ciałkowski email: <a href="mailto:michal.cialkowski@put.poznan.pl">michal.cialkowski@put.poznan.pl</a> tel. 616652205 Faculty of Working Machines and Transportation ul. Piotrowo 3 60-965 Poznań		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Basic knowledge of the ecology of transport. Fundamentals of computer-aided design
2	<b>Skills</b>	Can apply the scientific method to solve problems, implement experiments and reasoning
3	<b>Social competencies</b>	Knows the limits of their own knowledge and skills, able to clearly formulate questions, understands the need for further education
<b>Assumptions and objectives of the course:</b> Exercise self-execution of projects mainly in the field of ecology and economics of transport, analysis and evaluation.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. He knows the principle of measurement systems and test equipment - [K1A_W16] 2. He has in-depth knowledge of the ecology of transportation, necessary to solve problems in a selected area of specialization - [K1A_W21] 3. Has knowledge of current developments in terms of transport environment - [K1A-W24]		
<b>Skills:</b>		
1. He can decide on how to improve the knowledge and skills in the chosen specialty - [K1A_U01] 2. Able to communicate effectively both with specialists and niespecjalistami on issues relevant to the area being studied - [K1A_U02] 3. Can apply the scientific method to solve problems, implement research and reasoning - [K1A_U17]		
<b>Social competencies:</b>		
1. Is aware of and understands the importance and impact of non-technical aspects of engineering, including its impact on the environment and the associated responsibility for decisions - [K1A_K02] 2. Able to set priorities for implementation specified by you or other tasks - [K1A_K05] 3. He can think and act in a creative and enterprising - [K1A_K07]		
<b>Assessment methods of study outcomes</b>		

Final test		
<b>Course description</b>		
Technical design element or component airframe, developed on the basis of the output provided by the teacher. The project includes: functional and strength calculations, the description of designed construction, operation manual and part of the drawing.		
<b>Basic bibliography:</b>		
<b>Additional bibliography:</b>		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. There are prepared interim work	122	
2. Consultation	17	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	139	6
Contact hours	17	1
Practical activities	122	5