STUDY MODULE DESCRIPTION FORM					
		Code 1010631361010630466			
Field of study	Profile of study (general academic, practical)	Year /Semester			
Transport	(brak)	3/6			
Elective path/specialty	Subject offered in:	Course (compulsory, elective)			
Engineering of Pipeline Transport	Polish	obligatory			
Cycle of study:	Form of study (full-time,part-time)				
First-cycle studies	full-time				
No. of hours		No. of credits			
Lecture: - Classes: - Laboratory: -	Project/seminars:	4 5			
Status of the course in the study program (Basic, major, other) (university-wide, from another field)					
(brak)	(brak)				
Education areas and fields of science and art		ECTS distribution (number and %)			
Responsible for subject / lecturer:					
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# Prerequisites in terms of knowledge, skills and social competencies:

1	Knowledge	Basic knowledge of the ecology of transport. Fundamentals of computer-aided design		
2	Skills	Can apply the scientific method to solve problems, implement experiments and reasoning		
3	Social competencies	Knows the limits of their own knowledge and skills, able to clearly formulate questions, understands the need for further education		

# Assumptions and objectives of the course:

Exercise self-execution of projects mainly in the field of ecology and economics of transport, analysis and evaluation.

## Study outcomes and reference to the educational results for a field of study

## Knowledge:

- 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]

## Skills:

- 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]

# Social competencies:

- 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]

Assessment methods of study outcomes		
inal test		

# http://www.put.poznan.pl/

## Course description

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.

# Basic bibliography:

# Additional bibliography:

# Result of average student's workload

Activity	Time (working hours)
1. There are prepared interim work	122
2. Consultation	17

## Student's workload

Source of workload	hours	ECTS		
Total workload	139	5		
Contact hours	17	1		
Practical activities	122	4		