

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Passing Project</b>		Code <b>1010611261010614451</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>Food 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		ECTS distribution (number and %)
<b>Responsible for subject / lecturer:</b> dr inż. Łukasz Wojciechowski email: lukasz.wojciechowski@put.poznan.pl tel. 665- 2655, 647-5888 MRiT ul. Piotrowo 3, 60-695 Poznań		<b>Responsible for subject / lecturer:</b> dr hab. inż. Arkadiusz Stachowiak email: arkadiusz.stachowiak@put.poznan.pl tel. 6652655 MRiT ul. Piotrowo 3, 60-695 Poznań
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Student has knowledge of strength of materials and elementary machine design.
2	<b>Skills</b>	Student can execute basic calculations strength.
3	<b>Social competencies</b>	Student is aware of professional activities manner and taking responsibility for their decisions.
<b>Assumptions and objectives of the course:</b> Skill formation to use known and new knowledge to solve design problems. Introduction to food transportation specialty.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Student has a structured knowledge covering key topics useful for machines design. - [K1A_W17 K1A_W19 K1A_W24]		
2. Student knows the principles of rational machines design. - [K1A_W17 K1A_W19 K1A_W24]		
<b>Skills:</b>		
1. Student can design selected machines and refrigeration devices. - [K1A_U05 K1A_U08 K1A_U09K1A_U13]		
2. Student can use computer aided design software. - [K1A_U05 K1A_U08 K1A_U09K1A_U13]		
<b>Social competencies:</b>		
1. Student is aware of the importance and understands impact of non-technical aspects of engineering. Student also understands impact of engineer's decisions on environment. - [K1A_K02]		
<b>Assessment methods of study outcomes</b>		
Evaluation of presented projects and presentations.		
<b>Course description</b>		
During the implementation of interim project the individual conveyors and pumping systems projects for food industry are made. In addition to the project, each student presents a presentation on the construction and use of design solutions specific to the device or system that presents.		

<b>Basic bibliography:</b>		
1. 1. Basic elementary machine design, strength of materials and food transportation literature selected based on the theme of project.		
<b>Additional bibliography:</b>		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	150	6
Contact hours	21	1
Practical activities	150	6