

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>(-)</b>		Code <b>1010635211010648543</b>
Field of study <b>Mechanical Engineering</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>1 / 1</b>
Elective path/specialty <b>Thermal Engineering and Renewable Energy</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>Second-cycle studies</b>	Form of study (full-time, part-time) <b>part-time</b>	
No. of hours Lecture: <b>9</b> Classes: <b>9</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>		No. of credits <b>2</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>		
PhD Eng. Jan Górecki email: jan.gorecki@put.poznan.pl tel. 61 665 2053 Transport Engineering ul. Piotrowo 3, 61-139		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	The student should have elementary knowledge in the field of economics and economics of industrial enterprises. He fully understands and knows the processes necessary to design industrial machines. He is familiar with the latest trends in the construction of machines, with particular emphasis on the need for automation of production processes and devices used in them.
2	<b>Skills</b>	He can prepare and present a short verbal and multimedia presentation devoted to the results of the task entrusted to him. Is able to assess the material, environmental and labor costs to manufacture or modernize a simple machine. He can describe a simple production process.
3	<b>Social competencies</b>	The student understands the need and knows the possibilities of continuous training. Is aware of the importance and understands the non-technical aspects and effects of the engineer's activities on organizations. We can think and act in an entrepreneurial way.
<b>Assumptions and objectives of the course:</b>		
The main goal of the course is to familiarize the student with the stages of the project life cycle and management methods. The subject in particular deals with the process of initiating and defining a project with particular emphasis on the problems related to the analysis of the logical matrix (LFA).		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Has in-depth knowledge of entrepreneurship and business economics - [M2_W23] 2. Has basic knowledge of quality management systems - [M2_W13]		
<b>Skills:</b>		
1. He can advise on the selection of machines for the production line within the machine group covered by the specialty. - [M2_U14]		
<b>Social competencies:</b>		
1. Is ready to critically evaluate your knowledge and content you receive - [M2_K01] 2. Is ready to recognize the importance of knowledge in solving cognitive and practical problems and to consult experts in the event of difficulties in solving the problem - [M2_K02]		
<b>Assessment methods of study outcomes</b>		
Exam on the basis of an examination consisting of 10 general-purpose general questions (for the correct answer to each question) 1 point Grading: below 0 ÷ 4 points? Ndst., 5? Dst, 6 points? Dst +, 7 points? Db, 8 points? Db +, 9 points? Bdb). Project: Credit based on the group project given at the end of the exercise class, which is assessed on the basis of the evaluation card provided by the teacher.		

<b>Course description</b>		
1. The life cycle of the project 2. Methods of initiating the project 3. Methods of defining the project 4. Initiating the project with technique 6-3-5 5. Description of the effects and causes of a given situation using the problem tree 6. Description of actions and their consequences using the objective tree 7. Assessment of the project objective in the SMART criteria 8. Analysis of the logical matrix (LFA) as a method of defining the project		
<b>Basic bibliography:</b> 1. Trocki M., Zarządzanie projektami, Polskie Wydawnictwo Ekonomiczne, 2003 2. Trocki M., Metody i standardy zarządzania projektami, Polskie Wydawnictwo Ekonomiczne, 2017 3. Trocki M., Nowoczesne zarządzanie projektami, Polskie Wydawnictwo Ekonomiczne, 2012		
<b>Additional bibliography:</b> 1. Trocki M., Organizacja projektowa: podstawy, modele, rozwiązania, Polskie Wydawnictwo Ekonomiczne, 2014		
<b>Result of average student's workload</b>		
Activity	Time (working hours)	
1. Participation in lectures	8	
2. Consultation of lecture content	2	
3. Participation in exercise classes	8	
4. Consultation of the content of the classes	2	
5. Preparation of the final work	10	
6. Preparation for the exam	5	
7. Participation in the exam	1	
8. Defense of the developed group project	1	
9. Preservation of lecture content	6	
10. Strengthening the content of exercise classes	6	
<b>Student's workload</b>		
Source of workload	hours	ECTS
Total workload	49	2
Contact hours	22	1
Practical activities	0	0