

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Marketing and Finances in Power Engineering		Code 1010341541010324924
Field of study Mathematics	Profile of study (general academic, practical) general academic	Year /Semester 2 / 4
Elective path/specialty Mathematical Modelling	Subject offered in: polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 2 Classes: - Laboratory: 2 Project/seminars: -		No. of credits 6
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) from field
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 6 100% 6 100%
Responsible for subject / lecturer: Prof. dr hab. inż. Konrad Skowronek email: konrad.skowronek@put.poznan.pl tel. 616652388 Elektryczny ul. Piotrowo 3A, 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic knowledge of mathematics, physics and electrical engineering basics.
2	Skills	The ability to understand and interpret knowledge conveyed in the classroom. Ability to effectively self-education in a field related to the chosen field of study.
3	Social competencies	Is aware of the need to broaden their competence, willingness to work together as a team.
Assumptions and objectives of the course: Familiar with the basic concepts of operating in marketing and finance in the context of Energetics.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Characterize the concepts and methodologies for marketing and financial markets. - [K_W03 ++]		
2. Evaluate the effectiveness of marketing and investment. - [K_W03 ++, K_W12 +++]		
Skills:		
1. Apply knowledge of the theory of science, technology and economics in the preparation of investment and marketing for them. - [K_U36 ++, K_U37 +++]		
2. Obtain information from the literature and the Internet, work individually, independently solve problems in the theory of modeling and analysis of economic issues and marketing. - [K_U37+++]		
Social competencies:		
1. Able to think and act in an entrepreneurial manner in the analysis of economic, social and marketing. - [K_K01 +, K_K06 ++]		
Assessment methods of study outcomes		

<p>Lecture ? assess the knowledge and skills listed on a written exam on the theory of marketing and finance.</p> <p>Laboratory: ? test and favoring knowledge necessary for the accomplishment of the problems in the area of laboratory tasks, ? continuous evaluation for each course - rewarding gain skills they met the principles and methods ? assessment of knowledge and skills related to the implementation of the tasks your practice, the assessment report performed exercise.</p> <p>Get extra points for the activity in the classroom, and in particular for: ? propose to discuss additional aspects of the subject; ? the effectiveness of the application of the knowledge gained during solving the given problem; ? ability to work within a team practice performing the task detailed in the laboratory; ? subsequent to the improvement of teaching materials; ? developed aesthetic diligence reports and jobs - in the self-study.</p>		
Course description		
<p>Lecture: Elements of general management theory, the mechanism of the market, marketing elements, elements of accounting, economic analysis of the efficiency of investment, business planning. Elements of techno-economic analysis of the distribution station. Fundamentals of economic analysis in the energy sector. Criteria for economic assessment of energy efficiency investments. System market and the local market. The process of setting up a company. Funding: equity, foreign capital: bank credit, trade credit, leasing, factoring, EU funds.</p> <p>Project: The electricity market in Poland. Getting to know the exchange of electricity. Economic aspects of the enterprise. The implementation of an exemplary project in energy efficiency investments.</p>		
Basic bibliography:		
<p>1. Kramer T. "Podstawy marketingu", PWN, Warszawa, 2000 2. Korenik D., Korenik S. "Podstawy finansów", PWN, Warszawa, 2008</p>		
Additional bibliography:		
<p>1. Pomykalska B., Pomykalski P. "Analiza finansowa przedsiębiorstwa", PWN, Warszawa, 2006 2. Prace dyplomowe IEEP PP 3. Internet</p>		
Result of average student's workload		
Activity	Time (working hours)	
1. participation in lecture classes	30	
2. participation in laboratory classes	30	
3. participation in consultation concerning the lecture	10	
4. participation in consultation concerning the laboratory	10	
5. preparation for the test/exam	35	
6. test/exam	5	
7. preparation for laboratory exercises and drawing reports up	30	
Student's workload		
Source of workload	hours	ECTS
Total workload	150	6
Contact hours	85	4
Practical activities	45	2