

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Subj.preparing for energy companies operating in the market</b>		Code <b>1010311421010316973</b>
Field of study <b>Power Engineering</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>1 / 2</b>
Elective path/specialty <b>-</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: <b>15</b> Classes: <b>-</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 <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>2 100%</b> <b>2 100%</b>
<b>Responsible for subject / lecturer:</b>  dr inż. Justyna Michalak email: justyna.michalak@put.poznan.pl tel. 616652030 Elektryczny ul. Piotrowo 3a, 60-965 Poznan		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Student has knowledge in the scope of enterprise and knows the basic principles of economy
2	<b>Skills</b>	Student knows how to determine relations between market enterprises. He can to determine profitability of power enterprises on market.
3	<b>Social competencies</b>	Student accept readiness to start collective work and to take a decision.
<b>Assumptions and objectives of the course:</b> To get know of definitions and the basic kinds of power enterprises, understanding of their action and to gain skills and competences allowing to estimate situation of power enterprises in country with reference to world trend taking into account energy consumption of production processes. To learn cost methods of evaluation of economic profitability of power investments.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b> 1. Student knows fundamental notions in the scope of power economy. Student has basic knowledge about the role and importance of power engineering, about energy resources and the way of their utilization taking into account the production structure of National Energy System. Student knows the role and place of power enterprises on market . - [K_W22 +] 2. Student has the basic knowledge in the scope of power enterprise functioning and knows the principles of economy and of managing of enterprise on Market. Student knows account methods of economic profitability assessment of power enterprises. - [K_W23+++]		
<b>Skills:</b> 1. is able to acquire information from books, data bases and other sources, is able to integrate received information, to gain data for economic profitability analysis of investment, to perform interpretation of them, and also to conclude and to formulate and to substantiate opinion. - [K_U01+] 2. Is able to elaborate the documentation concerning realization of engineering task and to prepare the next including the discussion on the results of realization of this task. Is able to perform the analysis of economic profitability of power enterprise. - [K_U03+] 3. Is able to evaluate the power situation and knows the principles of rational management. Is able to evaluate energy consumption of production process. - [K_U20++]		
<b>Social competencies:</b>		

1. Student has the consciousness of economic aspects in power enterprise managing on market. Student has the consciousness about responsibility for taken decisions concerning economic profitability of power enterprises. - [K\_K02+ K\_K05++]

### Assessment methods of study outcomes

-Lecture

evaluation of knowledge and competitions by written test (13 week)

permanent evaluation during every classes(rewarding for activity and particularly proposing to discuss new aspects of problem)

### Course description

-Definition and types of power enterprises on the market. Their place and importance for National Energy System. Division of energy sources into renewable and non-renewable sources and division of power enterprises. Costing methods of assessing economic profitability of power enterprises and, their deviation of static and dynamic methods (discount). Discount account. Criteria for annual costs. Update 2017:Issues related to investment risk assessment in power engineering for cost method.

Applied methods of education: lectures with a presentation supplemented by the examples given on the whiteboard.

### Basic bibliography:

1. Sierpińska M., Jachna T., Ocena przedsiębiorstwa według standardów światowych, Wydawnictwo Naukowe PWN, Warszawa 2009.
2. Bednarski L., Borowiecki R., Duraj J., Kurtys E., Waśniewski T., Wersty B., Analiza ekonomiczna przedsiębiorstwa, Wydawnictwo Akademii Ekonomicznej im Oscara Langego we Wrocławiu, Wrocław 2003.
3. Leszczyński Z., Skowronek-Mielczarek A., Analiza ekonomiczno-finansowa firmy, PWE 2004.
4. Paska J., Ekonomika w elektroenergetyce, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2007.
5. Sierpińska M., Jachna T., Ocena przedsiębiorstwa według standardów światowych, Wydawnictwo Naukowe PWN, Warszawa 2007.
6. Bednarski L., Borowiecki R., Duraj J., Kurtys E., Waśniewski T., Wersty B., Analiza ekonomiczna przedsiębiorstwa, Wydawnictwo Akademii Ekonomicznej im Oscara Langego we Wrocławiu, Wrocław 2003.
7. Leszczyński Z., Skowronek-Mielczarek A., Analiza ekonomiczno-finansowa firmy, PWE 2004.
8. Paska J., Ekonomika w elektroenergetyce, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2007.

### Additional bibliography:

1. Ustawa z dnia 10 kwietnia 1997 r. PRAWO ENERGETYCZNE z Rozporządzeniami Ministra Gospodarki w sprawie szczegółowych zasad kształtowania i kalkulacji taryf oraz zasad rozliczeń w obrocie energią elektryczną.
2. Sierpińska M., Wędzki D., Zarządzanie płynnością finansową w przedsiębiorstwie, Wydawnictwo Naukowe PWN, 2008
3. Ustawa z dnia 10 kwietnia 1997 r. PRAWO ENERGETYCZNE z Rozporządzeniami Ministra Gospodarki w sprawie szczegółowych zasad kształtowania i kalkulacji taryf oraz zasad rozliczeń w obrocie energią elektryczną.
4. Sierpińska M., Wędzki D., Zarządzanie płynnością finansową w przedsiębiorstwie, Wydawnictwo Naukowe PWN, 2008
5. Michalak J., Ocena ryzyka inwestycyjnego w energetyce, Przegląd Naukowo-Metodyczny, Edukacja dla bezpieczeństwa 2014.

### Result of average student's workload

Activity	Time (working hours)
1. participation in the lectures	15
2. participation in the lecture consultation	7
3. preparation for credit	10

### Student's workload

Source of workload	hours	ECTS
Total workload	32	2
Contact hours	17	1
Practical activities	0	0