STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
(-)		**1010314391010316933**
Field of study: **Electrical Engineering**	Profile of study (general academic, practical): **(brak)**	Year /Semester: **5 / 9**
Elective path/specialty: **Electric Power Systems**	Subject offered in: **Polish**	Course (compulsory, elective): **obligatory**
Cycle of study: **First-cycle studies**	Form of study (full-time,part-time): **part-time**	
No. of hours: Lecture: **9** Classes: **9** Laboratory: **-** Project/seminars: **-**		No. of credits: **2**
Status of the course in the study program (Basic, major, other): **(brak)**	(university-wide, from another field): **(brak)**	
Education areas and fields of science and art: **technical sciences** **Technical sciences**		ECTS distribution (number and %): **2 100%** **2 100%**

Responsible for subject / lecturer:

dr inż. Justyna Michalak
email: justyna.michalak@put.poznan.pl
tel. 616652030
Wydział Elektryczny
ul. Piotrowo 3A 60-965 Poznań

Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Student has a knowledge in the scope of basic definitions concerning power companies and student knows basic principles of economics.
2	**Skills**	Student is able to determine the dependencies between the entities operating on the market
3	**Social competencies**	Student is ready to teamwork and to make a decision

Assumptions and objectives of the course:

To acquaint methods of evaluation of economic effectiveness of power investments: cost methods and profit methods. To acquaint basis of financial management of power enterprises

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

Knowledge:

1. Has a knowledge in the scope of the basis of financial management of power companies - [K_W20 +K_W22++K_W23 ++++++K_W25 ++++, K_W27+++]
2. Has a knowledge in the scope of basic methods of evaluation of economic effectiveness of power enterprises: cost methods and profit methods. - [K_W20++K_W24++ K_W27+++ K_W27+]

Skills:

1. Is able to evaluate economic effectiveness of power companies limiting environment pollution - [K_U07+K_U16+++]
2. Is able to collect data essential to carry out analysis of economic effectiveness of power enterprises - [K_U01++, K_U03+, K_U08+K_U14++, K_U20+++]

Social competencies:

1. Has a consciousness of economy aspects power company conducting on market. - [K_K02+K_K05++++++]

Assessment methods of study outcomes

Lecture

- evaluation of knowledge and competitions by written test (6 week),
- permanent evaluation during every classes (rewarding for activity)

Classes

- evaluation of knowledge and competitions by written test connected with calculation exercises (8 week)
- permanent evaluation during every classes (rewarding for activity)

evaluation of competence to use acquainted methods and rules

Course description

Financial economy of power enterprises. New power investments, modernization and overhauls in power engineering, evaluation of economic effectiveness: cost methods and profit methods.

Basic bibliography:

1. Sierpińska M., Jachna T., Ocena przedsiębiorstwa według standardów światowych, Wydawnictwo Naukowe PWN, Warszawa, 2017
2. Góra S., Gospodarka elektroenergetyczna w przemyśle, Państwowe Wydawnictwo Naukowe, Warszawa, 1975.
3. Soliński I.: Ekonomika i organizacja sektorów systemu paliwowo-energetycznego, Uczelniane Wydawnictwa Naukowo-Dydaktyczne AGH, Kraków 2000.
4. Bartnik R.: Rachnek efektywności techniczno-ekonomicznej w energetyce zawodowej, Oficyna Wydawnicza Politechniki Opolskiej, Opole 2008.
5. Paska J., Ekonomika w elektroenergetyce, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa, 2007.
6. Laudyn D., Rachunek ekonomiczny w elektroeneregtyce, 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 energia elektryczną.
2. Drury C., Rachunek kosztów Wydawnictwo Naukowe PWN, Warszawa, 1996.
3. Janasz W, Podstawy ekonomii przemysłu, Wydawnictwo Naukowe PWN, Warszawa, 1997.

Result of average student's workload

Activity	Time (working hours)
1. participation in lectures	9
2. execution of calculation exercises	9
3. tutorials related to lectures	5
4. tutorials related to classes	5
5. preparation to exam	10

Student's workload

Source of workload	hours	ECTS
Total workload	38	2
Contact hours	28	1
Practical activities	0	0