STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Energy policy		**1010632231010631573**
Field of study	Profile of study (general academic, practical)	Year /Semester
Mechanika i budowa maszyn	**(brak)**	**2 / 3**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
Gas technology and renewable energy	**English**	**obligatory**
Cycle of study:	Form of study (full-time,part-time)	
Second-cycle studies	**full-time**	
No. of hours		No. of credits
Lecture: **1** Classes: **-** Laboratory: **-** Project/seminars: **-**		**1**
Status of the course in the study program (Basic, major, other)	(university-wide, from another field)	
(brak)	**(brak)**	
Education areas and fields of science and art		ECTS distribution (number and %)
technical sciences		**1 100%**
Technical sciences		**1 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowladge in the field of economy, entrepreneurship and energy sources (fossil fuels, biomass, wind, sun, etc.)
2	**Skills**	Student should have skills required to solve engineering problems with scientifically valid methodologies. Can effectively acquire the information from various sources including datasheets, literature and Internet
3	**Social competencies**	Knows the limitations of his or her own knowledge and skills.

Assumptions and objectives of the course:

-To acquaint students with knowledge about energy market, energy policy and energy law.

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

Knowledge:

1. Has an in-depth knowledge of entrepreneurship and business economy. ? [K2A_W14] - [-]
2. Has general knowledge in the field of standardization, recommendations and EU directives, national, international and industry standards? [K2A_W09] - [-]
3. Has a basic knowledge of quality management systems ? [K2A_W15] - [-]

Skills:

1. Is able to obtain information from the literature, internet, databases and other sources. Can integrate the information to interpret and learn from them, create and justify opinions. - [K1A_U03] - [-]
2. Is able to freely use an international language in contacts with professionals from the same field of study.- [K2A_U01] - [-]

Social competencies:

1. Is aware of and understands the importance and impact of non-technical aspects of mechanical engineering activities and its impact on the environment and responsibility for own decisions. - [K2A_K02] - [-]
2. Is aware of social role of mechanical engineer, understands the need for and is able to deliver opinions and knowledge in the field of machine design, particularly through the media. ? [K2A_K04] - [-]
3. Is able to interact in a group taking on the different roles. ? [K2A_K03] - [-]

Assessment methods of study outcomes
-Lecture ? the written examination
Course description
-Availability of energy resources in the World and Europe a) fossil fuels: coal, oil, lignite, natural gas, uranium; b) renewable energy: wind, solar energy, geothermal energy, biomass, hydro energy; energy prices on world markets, energy law in EU, Poland, power exchange, mechanisms of formation of fuel prices, organization of supply networks and storage of fuels in the energy sector
Basic bibliography: 1. Petroleum Economist 2. Gas To Power Journal 3. European Energy Review 4. Wind Energy 5. Oil and Gas Industry Journal
Additional bibliography: 1. Gaz Woda i Technika Sanitarna 2. Czysta Energia 3. IEA International Energy Agency, British Petroleum BP, EPRI from USA

Result of average student's workload

Activity	**Time (working hours)**
1. Preparation for the lecture	5
2. Participation in the lecture	15
3. Fixing the lecture	15
4. Consultation for the lecture	2
5. Preparing to pass the lecture	10
6. Participation in the completion of the lecture	2

Student's workload

Source of workload	**hours**	**ECTS**
Total workload	49	1
Contact hours	19	1
Practical activities	0	0