



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Energy Policy and Energy Markets

Course

Field of study

Industrial and Renewable Energy

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/3

Profile of study

general academic

Course offered in

english

Requirements

compulsory

Number of hours

Lecture

15

Tutorials

Laboratory classes

0

Projects/seminars

15

Other (e.g. online)

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

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Faculty of Environmental Engineering and Energetic

ul. Piotrowo 3 60-965 Poznań

Responsible for the course/lecturer:



Prerequisites

KNOWLEDGE: Basic knowledge of the economy, entrepreneurship and energy sources (fossil fuels, biomass, wind, sun, etc.)

SKILLS: The student should have the skills required to solve engineering problems using scientifically sound methodologies. Can effectively obtain information from various sources, including data sheets, literature and the Internet

SOCIAL COMPETENCIES: He knows the limits of his own knowledge and skills.

Course objective

To familiarize students with the legal aspects governing the production and distribution of fuels and energy, to present basic principles shaping and influencing the production and distribution of fuels and energy, energy security, and the energy market - what laws govern it.

Course-related learning outcomes

Knowledge

Has ordered and in-depth knowledge necessary to understand the issues of energy safety

Knows the basic principles of creating and developing various forms of entrepreneurship

Has knowledge of structures and processes for managing fuel extraction and processing enterprises

Skills

Is able to formulate and test hypotheses related to simple research problems

Is able to make a preliminary economic assessment when formulating and solving engineering tasks in the application of Industrial Power

Is able to communicate on topics related to energy policy with diverse audiences

Social competences

Is ready to recognize the importance of knowledge in solving cognitive and practical problems and to seek expert opinions in the event of difficulties in solving the problem yourself

He is ready to initiate actions for the social interest

Is ready to think and act in an entrepreneurial way

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Written exam - the pass condition is to obtain a minimum of 51% of the maximum number of points

Project - the right solution to a design issue

Programme content



Availability of energy resources in the world and in Europe a) fossil fuels: coal, oil, lignite, natural gas, uranium; b) renewable energy: wind, solar energy, geothermal energy, biomass, hydropower; energy prices on world markets, energy law in the EU, Poland, energy exchange, mechanisms of fuel price formation, organization of fuel supply and storage networks in the energy sector

Teaching methods

Lecture - multimedia presentation with talk

Project - independent or group solution of the given problem (s)

Bibliography

Basic

1. Petroleum Economist
2. Gas To Power Journal
3. European Energy Review
4. Wind Energy
5. Oil and Gas Industry Journal

Additional

1. Gaz Woda i Technika Sanitarna
2. Czysta Energia
3. IEA International Energy Agency, British Petroleum BP, EPRI from USA

Breakdown of average student's workload

	Hours	ECTS
Total workload	60	2,0
Classes requiring direct contact with the teacher	32	1,0
Student's own work (literature studies, preparation for tests, preparing for the laboratory, preparation the laboratory reports, consultation) ¹	28	1,0

¹ delete or add other activities as appropriate