COURSE DESCRIPTION CARD - SYLLABUS

Course name
Industrial Training [N2EPiO1>PZ]

Course

Field of study
Industrial and Renewable Energy Systems

Year/Semester
1/1

Area of study (specialization)
Thermal and Renewable Energy

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
part-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
120

Projects/seminars
0

Number of credit points

4,00

Coordinators

dr inż. Michał Gołębiewski
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Lecturers

Prerequisites

The student has knowledge of the applicable rules for the implementation of internships. He knows the regulations of internships and the conditions for passing them. Has basic knowledge of issues covered by the study program. Has knowledge related to the basic issues of industrial and renewable energy, in particular: energy production and processing processes, how to use energy efficiently. The student has the ability to creatively use the knowledge acquired during the second and first degree studies. The student can work in a working group. Is able to transparently distribute tasks in a group. Is able to interpret and perform received tasks correctly and is able to make a verbal presentation of the results of his work.

Course objective

Verification of the theoretical knowledge possessed by the student with reality, gaining new professional experience in real working conditions. Practical application of knowledge and skills acquired during the study in practice. Familiarizing the student with the realities of the functioning of the workplace against the background of applicable law.

Course-related learning outcomes

Knowledge:

1.has expanded knowledge necessary to understand profile subjects and specialist knowledge about construction, methods of designing, manufacturing, operating, security systems, and impact on the economy, society and the environment in the field of industrial and renewable energetic sectors in the workplace, in the specialties: 1. gas technologies and renewable energy, 2. thermal energetics
2.knows the basic principles of creating and developing various forms of entrepreneurship in the workplace
3.has in-depth knowledge of methods of linear measurements, temperature, pressure, humidity, fluid streams, speed, automation systems and modern digital interfaces used in control systems in the workplaces

Skills:
1.is able to use his knowledge to search for the right sources and interpret found information in order to solve both standard and non-standard engineering problems occurring in workplaces related to the energy or renewable industry
2.is able to communicate on topics related to industrial energy with diverse audiences in the work environment
3.is able to interact with other people as part of team work and take a leading role in teams assigned to solve engineering problems in the energy company

Social competences:
1.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 engineering problem himself in the workplace
2.is ready to initiate actions for the social interest as a part of the work carried out in the company
3.is ready to perform responsible professional roles, taking into account changing social needs, including:
− developing the profession"s achievements,
− maintaining the ethos of the profession,
− compliance with and development of the principles of professional ethics and actions to comply with these principles

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:
Completion of internship based on the internship report certified by the enterprise. Possibility of crediting professional work towards professional practice (condition of program compliance)

Programme content

Familiarization with the functioning of production, commercial or service enterprises related to the general industrial and renewable energy, construction of machinery and energy equipment, companies employing mechanics or maintenance specialists, companies giving the opportunity to learn about basic energy issues, such as:
- designing of structures (including: selection of engineering materials used as elements of machines and devices as well as methods and techniques of computer aided design of machines),
- energy systems design,
- management of energy systems,
- research and operation of equipment used in industrial and renewable energy,
- applicable health and safety regulations
- and other related.

Course topics

Not applicable

Teaching methods

Not applicable

Bibliography

Basic
Not applicable
Additional
Not applicable

Breakdown of average student's workload

	Hours	ECTS
Total workload	120	4,00
Classes requiring direct contact with the teacher	0	0,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	120	4,00