



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Professional training (6 weeks)

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### Course

Field of study

Environmental Protection Technologies

Area of study (specialization)

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Level of study

First-cycle studies

Form of study

full-time

Year/Semester

III/6

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

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### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

### Number of credit points

7

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### Lecturers

Responsible for the course/lecturer:

Justyna Werner, PhD

Responsible for the course/lecturer:

Faculty of Chemical Technology

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### Prerequisites

The student has structured, theoretically founded knowledge covering key issues in the field of environmental protection technology. Is able to obtain information from the indicated sources, correctly interprets them and draws conclusions.

### Course objective

Familiarization with technological processes in the chemical industry. Potential threats to the environment as a result of the plant's operations and how to counteract them. Methods for controlling environmental pollution. Preparation for work in the chemical and related industries, design offices, scientific and research institutions of the chemical industry.

### Course-related learning outcomes

#### Knowledge

1. Has basic knowledge of the life cycle of products, devices and installations in the chemical industry - [K\_W14]
2. Knows the basic methods, techniques, tools and materials used to solve simple tasks in the field of technology and engineering - [K\_W15]
3. Has the necessary knowledge about the risks associated with the implementation of chemical processes and knows the principles of risk assessment, knows international conventions and EU directives in the field of process safety, and knows the principles of the organization of the chemical products market (REACH) - [K\_W18]

#### Skills

1. Is able to conduct a critical analysis of the functioning method and assess existing technical solutions in chemical technology and engineering, in particular devices, apparatus, systems and processes - [K\_U12]
2. Based on general knowledge, explains the basic phenomena associated with significant processes in chemical technology and engineering - [K\_U16]

#### Social competences

1. Is able to properly set priorities for the implementation of the task - [K\_K04]
2. He correctly recognizes the problems and makes the right choices related to the exercise of the profession, in accordance with the principles of professional ethics - [K\_K05]
3. Is aware of the social role of a technical university graduate, and in particular understands the need for formulation and transfer to the public, in particular through the mass media, information and opinions on the achievements of science and other aspects of engineering activities; makes efforts to convey such information and opinions in a commonly understandable way - [K\_K07]



### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The credit on the basis of the certificate of internship, report on the internship and completed survey.

### Programme content

Environmental Protection Technologies - workplaces

The workplace as a place of future professional activity. Processes and technologies used in the plant. Potential threats to the environment as a result of the plant's operations. Environmental pollution control (air, soil, water). Technologies used to protect the environment.

Environmental Protection Technologies - faculties for environmental protection

The workplace as a place of future professional activity. Tasks of state administration in the field of environmental protection. Methods of administrative procedure in the event of a violation or exceeding of applicable standards. Methods for controlling environmental pollution (air, water, soil). Monitoring in practice. Environmental education programs. Departments of environmental protection in state and local administration - the goals of their activities. Independent task in the position indicated by the workplace.

### Teaching methods

Practical classes in the workplace

### Bibliography

Basic

Information materials provided by the company

Additional

Documents, instructions in force in the workplace - the place of the internship

### Breakdown of average student's workload

	Hours	ECTS
Total workload	240	7,0
Classes requiring direct contact with the teacher	0	0,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	240	7,0

<sup>1</sup> delete or add other activities as appropriate