



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Professional training (4 weeks)

### Course

Field of study

Year/Semester

Chemical Technology

I/1

Area of study (specialization)

Profile of study

Composite and Nanomaterials

general academic

Level of study

Course offered in

Second-cycle studies

English

Form of study

Requirements

full-time

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

0

0

0

Tutorials

Projects/seminars

0

0

### Number of credit points

5

### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

### Prerequisites

The student has structured, theoretically founded knowledge covering key issues in the field of chemical 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. 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 the necessary knowledge about both natural and synthetic raw materials, products and processes used in chemical technology, as well as directions of development of the chemical industry in the country and in the world - [K\_W09]
2. Knows the principles of construction, operation and selection of devices, reactors and apparatus used in chemical technology - [K\_W12]



3. Has knowledge in the field of technology and chemical engineering, machine science and apparatus of the chemical industry - [K\_W13]

4. Knows the basic methods, techniques, tools and materials used to solve simple tasks in the field of chemical technology and engineering - [K\_W15]

#### 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]

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#### 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

The workplace as a place of future professional activity. Understanding the chemical technologies used in the plant. Detailed familiarization with the technology chosen by the plant. The methods used to control process efficiency and product quality. Business practice and information acquired during education. Independent task in the position indicated by the workplace. The plant's activities in the field of environmental protection.

#### 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	160	5,0
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>	160	5,0

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