# POZNARO POZNAR

## POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Diploma Training (4 weeks) [S2IChiP1>PD]

Course

Field of study Year/Semester

Chemical and Process Engineering 1/1

Area of study (specialization)

Profile of study

Bioprocesses and Biomaterials Engineering general academic

Level of study Course offered in

second-cycle polish

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other (e.g. online)

0 0 160

Tutorials Projects/seminars

0 0

Number of credit points

5,00

Coordinators Lecturers

dr hab. Justyna Werner justyna.werner@put.poznan.pl

# **Prerequisites**

The student has ordered, theoretically founded knowledge of key issues in the field of chemical and process engineering. Is able to obtain information from the indicated sources, correctly interprets them and draws conclusions.

## Course objective

Familiarization with chemical and process engineering solutions used in various workplaces. Preparation for work in the chemical and related industries, design offices, and scientific and research institutions.

## Course-related learning outcomes

### Knowledge:

- 1. has extended and deepened knowledge in the field of chemistry and other related areas of science, allowing for the formulation and solving of complex tasks related to chemical engineering k\_w03
- 2. has knowledge in the field of complex chemical processes, including the appropriate selection of materials, raw materials, apparatus and devices for the implementation of chemical processes and the characterization of the obtained products k w04
- 3. knows modern methods of examining the structure and properties of materials, necessary for the

characterization of raw materials and products of the chemical and related industries; knows the rules of organization of the market of chemical products (reach) and other products of processing industries k w08

#### Skills:

- 1. can use professional software, using it to design chemical processes and process installations k\_u07
- 2. has the ability to adapt knowledge in the field of chemistry and related fields to solve technological problems and plan new industrial processes, not only chemical k\_u11
- 3. has the ability to assess the technological suitability of raw materials and the selection of the technological process in relation to the quality requirements of the product k\_u14

## Social competences:

- 1. can properly define the priorities for the implementation of the assigned task k k04
- 2. can think and act in a creative and enterprising way k k06
- 3. is aware of the social role of a technical university graduate, and especially understands the need to formulate and transmit to the society, in particular through the mass media, information and opinions on the achievements of technology and other aspects of engineering activities; makes efforts to provide such information in a commonly understandable manner, justifying different points of view k k07

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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 or design office as a place of future professional activity.

Understanding the issues of chemical and process engineering used in the plant, design office.

Detailed familiarization with unit processes and operations selected by the plant.

Solving tasks in a position indicated by the workplace or design office.

Activities of the plant and design office in the field of applying solutions in chemical and process engineering aspects.

Acquiring skills in the practical basics of designing technological and engineering processes.

## **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	120	5,00
Classes requiring direct contact with the teacher	120	5,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	0	0,00