



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Economic aspects of the chemical industry [S2TCh2>EAPC]

### Course

Field of study Chemical Technology	Year/Semester 2/3
Area of study (specialization) Applied Electrochemistry	Profile of study general academic
Level of study second-cycle	Course offered in polish
Form of study full-time	Requirements compulsory

### Number of hours

Lecture 30	Laboratory classes 0	Other (e.g. online) 0
Tutorials 0	Projects/seminars 0	

### Number of credit points

2,00

### Coordinators

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### Lecturers

### Prerequisites

The student should have basic knowledge of economics and be able to perceive and interpret economic phenomena.

### Course objective

The course enables students to learn about production management in a chemical company.

### Course-related learning outcomes

Knowledge:

1. The student has extensive knowledge about investment in the chemical industry, management, running a business, and the transfer of technology. [K\_W9]

Skills:

1. The student can obtain and critically evaluate information from literature, databases, and other sources, e.g. financial statements. He/she can also develop opinions and write reports. [K\_U1]

2. The student can cooperate and manage a team. [K\_U2]

3. The student can identify an alternative path for further education. He/she can self-educate. [K\_U5]

Social competences:

1. The student understands the need for constant learning and improving professional skills. [K\_K1]
2. The student can think and act in a creative and entrepreneurial way. [K\_K6]
3. The student understands the need to provide information about the current state and development of chemical technology, the rules of using and handling chemical products, and the risks associated with the extraction of raw materials, chemical production, and distribution. [K\_K7]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The test consists of 20 questions (closed- and open-ended). The test will take place during the last lecture in a stationary or remote form on the Ekursy platform (only if it will be impossible to write a test in a stationary form). Grade thresholds:

Percentage Range Grade

- <0-50) 2.0 (Unsatisfactory)
- <50-60) 3.0 (Satisfactory)
- <60-70) 3.5 (Satisfactory plus)
- <70-80) 4.0 (Good)
- <80-90) 4.5 (Good plus)
- <90-100) 5.0 (Very good)

### Programme content

1. The production process and its organization in a chemical production company. Production planning and schedule. Production capacity and its calculation.
2. Production efficiency indicators and their monitoring.
3. Methods of increasing the efficiency of the use of enterprise resources.
4. Raw material management in an industrial company. Methods of normalization. Inventory planning.
5. Costs classification and its minimization in a production company.
6. Analysis of the most important costs in decision-making.
7. Methods of improving profits used in a production company.
8. The impact of external factors on a production company's development.

### Teaching methods

Multimedia presentation, case studies, discussion.

### Bibliography

Basic:

1. J. Wiśniewska, K. Janasz, Zarządzanie przedsiębiorstwem przemysłowym we współczesnej gospodarce. Wydanie II, Wydawnictwo CeDeWu, Warszawa 2018.
2. E. Michalski, Zarządzanie przedsiębiorstwem, Wydawnictwo Naukowe PWN, Warszawa 2022.
3. K. Szatkowski, Nowoczesne zarządzanie produkcją. Ujęcie procesowe. Wydawnictwo Naukowe PWN, Warszawa 2022.
4. J. Engelhardt (red.), Ekonomia przedsiębiorstw, CeDeWu, Warszawa 2017.

Additional:

1. K. Szczepańska, M. Bugdol, Podstawy zarządzania procesami, Wydawnictwo Difin, Warszawa 2016.
2. E. Pająk, Zarządzanie produkcją. Produkt. Technologia. Organizacja, Wydawnictwo Naukowe PWN, Warszawa 2022.
2. K. Grzybowska, Gospodarka zapasami i magazynem. Część 1. Zapasy, Wydawnictwo Difin, Warszawa 2009.

### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00