



UNIVERSITATEA BABEȘ-BOLYAI
BABEȘ-BOLYAI TUDOMÁNYEGYETEM
BABEȘ-BOLYAI UNIVERSITÄT
BABEȘ-BOLYAI UNIVERSITY
TRADITIO ET EXCELLENTIA

Tradiție și Excelență prin
Cultură - Știință - Inovație din 1581



Facultatea de Chimie și Inginerie Chimică

Str. Arany János nr. 11
Cluj-Napoca, cod poștal 400028
Tel.: 0264-59.38.33
Fax: 0264-59.08.18

secretariat.chem@ubbcluj.ro
www.chem.ubbcluj.ro

SYLLABUS

Management of Chemical Process Engineering

University year 2025

1. Information regarding the programme

1.1. Higher education institution	Babes-Bolyai University
1.2. Faculty	Faculty of Chemistry and Chemical Engineering
1.3. Department	Department of Chemical Engineering
1.4. Field of study	Chemical Engineering
1.5. Study cycle	Master
1.6. Study programme/Qualification	Advanced Chemical Process Engineering
1.7. Form of education	Full time education

2. Information regarding the discipline

2.1. Name of the discipline	Management of Chemical Process Engineering	Discipline code	CME 7233
2.2. Course coordinator	Professor dr.eng.Paul Serban Agachi		
2.3. Seminar coordinator	Professor dr.eng.Paul Serban Agachi		
2.4. Year of study	I	2.5. Semester	2
2.6. Type of evaluation	E	2.7. Discipline regime	DS/Optional

3. Total estimated time (hours/semester of didactic activities)

3.1. Hours per week	4	of which: 3.2 course	2	3.3 seminar/laboratory	2
3.4. Total hours in the curriculum	56	of which: 3.5 course	28	3.6 seminar/laborator	28
Time allotment for individual study (ID) and self-study activities (SA)					hours
Learning using manual, course support, bibliography, course notes (SA)					14
Additional documentation (in libraries, on electronic platforms, field documentation)					30
Preparation for seminars/labs, homework, papers, portfolios and essays					21
Tutorship					2
Evaluations					2
Other activities: consultations					
3.7. Total individual study hours	69				
3.8. Total hours per semester	125				
3.9. Number of ECTS credits	5				

4. Prerequisites (if necessary)

4.1. curriculum	
4.2. competencies	Some theory of systems notions, some economic notions

5. Conditions (if necessary)

5.1. for the course	
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5.2. for the seminar /lab activities	
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6. Specific competencies acquired ¹

Professional/essential competencies	<ul style="list-style-type: none"> Planning, organization management, leadership
Transversal competencies	<ul style="list-style-type: none"> The student knows: organizational management, leadership, SWOT analysis, time management, financial management of a company, business plans The student is able to plan for her/his life The student has the ability to work independently to obtain skills in personal management

7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	<ul style="list-style-type: none"> To plan and organize activities
7.2 Specific objective of the discipline	<ul style="list-style-type: none"> To differentiate between management and leadership

8. Content

8.1 Course	Teaching methods	Remarks
8.1.1. Introduction to Management theories	Power point, Chat GPT	2 hours
8.1.2.-8.1.3. Theory of systems applied to Management	Power point, Chat GPT	4 hours
8.1.4.-8.1.5. Basic management systems & Functions	Power point, Chat GPT	4 hours
8.1.6.-8.1.7. Strategic and Operational Planning	Power point, Chat GPT	4 hours
8.1.8.-8.1.10. Leadership vs Management	Power point, Chat GPT	6 hours

¹ One can choose either competences or learning outcomes, or both. If only one option is chosen, the row related to the other option will be deleted, and the kept one will be numbered 6.



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8.1.11.-8.1.12. Time management. Financial management	Power point, Chat GPT	4 hours
8.1.13.-8.1.14. Risk management. Stress management	Power point, Chat GPT	4 hours
Bibliography Recommended for every course		
8.2 Seminar / laboratory	Teaching methods	Remarks
8.1.1. Introduction to Management theories	Power point, Chat GPT	Targeted presentation with application in real life (2 hours)
8.1.2.-8.1.3. Theory of systems applied to Management	Power point, Chat GPT	Targeted presentation with application in real life (4 hours)
8.1.4.-8.1.5. Basic management systems & Functions	Power point, Chat GPT	Targeted presentation with application in real life (4 hours)
8.1.6.-8.1.7. Strategic and Operational Planning	Power point, Chat GPT	Targeted presentation with application in real life (4 hours)
8.1.8.-8.1.10. Leadership vs Management		Targeted presentation with application in real life (6 hours)
8.1.11.-8.1.12. Time management. Financial management	Power point, Chat GPT	Targeted presentation with application in real life (4 hours)
8.1.13.-8.1.14. Risk management. Stress management	Power point, Chat GPT	Targeted presentation with application in real life (4 hours)
Bibliography Recommended for every course		

9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

- The content of the discipline is tailored on the market economy, explaining economic instability, market fluctuations, risks
- By acquiring the theoretical and methodological concepts and practical aspects included in the course *Management of Chemical Process Engineering*, students will acquire extensive knowledge, in accordance with the competences required in the Diploma Supplement and the NCA qualifications.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of final grade
10.4 Course	% solving the problems	Midterm Test	25%
	% solving the problems	Final exam	25%.
10.5 Seminar/laboratory	Percentage delivery homework	Continuous Assessment (Homework, Project)	50%
	Active presence in the labs and tutorials		
	% solving the problems	Midterm Test	25%
10.6 Minimum standard of performance			
A: 90 - 100			



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B: 80 -89

C: 70 -79

D: 60 -69

E: 0 - 59

50 for the minimum grade

11. Labels ODD (Sustainable Development Goals)²



Date:
25.03.2025

Signature of course coordinator

Signature of seminar coordinator

Date of approval:
15.04.2025

Signature of the head of department

² Keep only the labels that, according to the [Procedure for applying ODD labels in the academic process](#), suit the discipline and delete the others, including the general one for *Sustainable Development* – if not applicable. If no label describes the discipline, delete them all and write „Not applicable.”.