



UNIVERSITATEA BABEȘ-BOLYAI
BABEȘ-BOLYAI TUDOMÁNYEGYETEM
BABEȘ-BOLYAI UNIVERSITAT
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


Process Engineering Management

University year 2025

1. Information regarding the programme

1.1. Higher education institution	Universitatea Babeș-Bolyai din Cluj Napoca
1.2. Faculty	Chemistry and Chemical Engineering
1.3. Department	Chemistry and Chemical Engineering of the Hungarian Line of Studies
1.4. Field of study	Chemical Engineering
1.5. Study cycle	Master
1.6. Study programme/Qualification	CHIMIA ȘI INGINERIA NANO- ȘI BIOMATERIALELOR / NANO- ÉS BIOANYAGOK KÉMIAJA ÉS TECHNOLÓGIÁJA/CHEMISTRY AND ENGINEERING OF NANO- AND BIOMATERIALS
1.7. Form of education	Învățământ cu frecvență

2. Information regarding the discipline

2.1. Name of the discipline	Management of Chemical Process Engineering	Discipline code	CME 7329
2.2. Course coordinator	Professor Paul Serban Agachi		
2.3. Seminar coordinator	Professor Paul Serban Agachi		
2.4. Year of study	I	2.5. Semester	2
2.6. Type of evaluation	E	2.7. Discipline regime	DS

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
3.5.1. Learning using manual, course support, bibliography, course notes (SA)					
3.5.2. Additional documentation (in libraries, on electronic platforms, field documentation)					14
3.5.3. Preparation for seminars/labs, homework, papers, portfolios and essays					28
3.5.4. Tutorship					14
3.5.5. Evaluations					14
3.5.6. Other activities: consultations					14
3.7. Total individual study hours	126				
3.8. Total hours per semester	182				
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



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

5. Conditions (if necessary)

5.1. for the course	
5.2. for the seminar /lab activities	

6.1. 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">Planning, organization management, leadership

6.2. Learning outcomes

Knowledge	The student knows: organizational management, leadership, SWOT analysis, time management, financial management of a company, business plans
Skills	The student is able to plan for her/his life
Responsibility and autonomy:	The student has the ability to work independently to obtain skills in personal management

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

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.



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

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
Introduction to Management theories	Power point, Chat GPT	
Theory of systems applied to Management	Power point, Chat GPT	
Basic management systems & Functions	Power point, Chat GPT	
Strategic and Operational Planning	Power point, Chat GPT	
Leadership vs Management	Power point, Chat GPT	
Time management	Power point, Chat GPT	
Financial management	Power point, Chat GPT	
Risk management	Power point, Chat GPT	
Stress management	Power point, Chat GPT	
Bibliography		
8.2 Seminar / laboratory	Teaching methods	Remarks
Introduction to Management theories	Power point, Chat GPT	Targeted presentation with application in real life
Theory of systems applied to Management	Power point, Chat GPT	Targeted presentation with application in real life
Basic management systems & Functions	Power point, Chat GPT	Targeted presentation with application in real life
Strategic and Operational Planning	Power point, Chat GPT	Targeted presentation with application in real life
Leadership vs Management		Targeted presentation with application in real life
Time management	Power point, Chat GPT	Targeted presentation with application in real life
Financial management	Power point, Chat GPT	Targeted presentation with application in real life
Risk management	Power point, Chat GPT	Targeted presentation with application in real life
Stress management	Power point, Chat GPT	Targeted presentation with application in real life

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



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

- The content of the discipline is tailored on the market economy, explaining economic instability, market fluctuations, risks

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 B: 80 -89 C: 70 -79 D: 60 -69 E: 0 - 59 50 for the minimum grade			

11. Labels ODD (Sustainable Development Goals)²



General label for Sustainable Development

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.”.



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

Date:
25.03.2025

Signature of course coordinator

Paul

Signature of seminar coordinator

.....

Date of approval:
25.03.2025

Signature of the head of department

Paul