

SYLLABUS

1. Information about the program

1.1 Higher education institution	POLITEHNICA UNIVERSITY OF TIMISOARA
1.2 Faculty ¹ / Departament ²	Faculty of Chemical Engineering, Biotechnologies and Environmental Protection / CAICON + CAICAM
1.3 Field of study (name/code ³)	Chemical Engineering / 10.30.50
1.4 Study cycle	License
1.5 Study program (name/code/qualification)	Chemical Engineering / 10.30.50.60/ engineer

2. Information about the discipline

2.1 Name of discipline/Formative category ⁴		Practicum 1 (Domain-Specific) / DD					
2.2 Coordinator / holder of the applied activities		Ș.L.dr.ing. Sorina BORAN/Conf.dr.ing. Radu LAZĂU					
2.3 Year of study ⁵	III	2.4 Semester	6	2.5 Type of evaluation	C	2.6 Regime of discipline ⁶	DI

3. Total estimated time (of the practical activities, or partially assisted activities)

3.1 Number of hours/week	20
3.2 Total number of hours in the curriculum	100
3.3 Number of credits	4

4. Prerequisites

4.1 Curriculum	<ul style="list-style-type: none"> Subjects from the Education Plan completed prior to the practice
4.2 Competences	<ul style="list-style-type: none"> Competences conferred by the fundamental subjects, of field and of specialty

5. Mission of the discipline Practice and operating conditions

5.1 Mission	<ul style="list-style-type: none"> Knowledge of the structure, organization and production activities of the relevant economic units
5.2 Operating conditions of the activities	<ul style="list-style-type: none"> Students will be guided by the tutor from the practice unit Students will respect the safety and work protection rules of the unit

6. Competences acquired through the discipline according to its stated mission

Specific competences	<ul style="list-style-type: none"> Learning how to carry out the professional activities in units with an industrial profile, research or laboratory work specific to the field Knowledge and understanding of technological processes and their analysis Applying the acquired knowledge to the fundamental subjects, of field and of specialty within the units where the practice is carried out
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¹ The name of the faculty which manages the educational curriculum to which the discipline belongs

² The name of the department entrusted with the discipline, and to which the course coordinator/holder belongs.

³ The code provided in HG - on the approval of the Nomenclature of fields and specializations / study programs, annually updated.

⁴ Discipline falls under the educational curriculum in one of the following formative disciplines: Basic Discipline (DF), Domain Discipline (DD), Specialist Discipline (DS) or Complementary Discipline (DC).

⁵ Year of studies in which the discipline is provided in the curriculum.

⁶ Discipline may have one of the following regimes: imposed discipline (DI) or compulsory discipline (DOb)-for the fundamental fields of study other than engineering.

Professional competences ascribed to specific competences	<ul style="list-style-type: none"> Analyze the improvement of production processes Manage chemical analysis procedures Test materials Write technical reports Carry out chemical experiments Approve engineering projects Manage the environmental impact of operations
Transversal competences ascribed to the specific competences	<ul style="list-style-type: none"> Lead quality control; Apply scientific, technological and engineering knowledge; Use equipment, instruments or technological equipment in an accurate manner

7. Objectives of discipline (associated to competences at point 6)

7.1 General objective of discipline	<ul style="list-style-type: none"> Acquiring the general aspects related to the chemical industry, how to organize a department (enterprise) in the field and some basic operations in the industry. It also contributes to the knowledge and use of specific notions of technology, plant operation, production and product control
7.2 Specific objectives	<ul style="list-style-type: none"> Integration of general knowledge of mechanical, electrical and chemical engineering associated with specific technologies. Comparative evaluation of simple processes based on specific parameters

8. Theme of applied activities / practice⁷

8.1 Theme of the practice	
Learning the principles of operation of some industrial equipment and/or laboratory devices Understanding of the basic technologies used in the chemical industry and the specific methods of analysis and control.	
8.2 Types of activities	8.3 Duration
General and specific notions of safety and health at work	8
Organizational notions of the unit where the practice is carried out	8
Utilities specific to the unit where the practice is carried out	24
Basic installations and equipment	24
Practical classes in the analysis and control of raw materials and products	36

9. Student tasks⁸

<p>To carry out the 100 hours of practice related to the internship in full, respecting the rules of protection and work security of the partner unit</p> <p>To acquire the related laboratory analysis technology and methods</p> <p>To understand the operation of the machinery and equipment in the unit where the practice is carried out</p> <p>To solve the assignment or practice project received</p> <p>To draw up the practice file</p>
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10. Evaluation

10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share of the final grade
The activity carried out during the internship	The evaluation will be done by the tutor from the economic unit where the practice takes place, the same one who will also issue the practice certificate	50%
Preparation of the activity summary and the practice notebook	Colloquium – is held in the presence of the tutor from the faculty based on the activity summary and the practice notebook	50%

⁷ The types of activities are to be described according to the Faculty's Regulations for Practical activities and to the specific subject area.

⁸ Student tasks are to be described according to the Faculty's Regulations for Practical activities.

10.4 Minimum performance standard (minimum amount of knowledge necessary to pass the discipline and the way in which such knowledge is verified ⁹)

- The student's grasp of the principles of operation of some industrial equipment and/or laboratory devices, understanding of the basic technologies used in the chemical industry and specific methods of control and analysis. To promote the discipline, the result of the colloquium must be classified as "promoted"

Date of completion

**Course coordinator
(signature)**

**Coordinator of applied activities
(signature)**

Ş.L.dr.ing. Sorina BORAN
Conf.dr.ing. Radu LAZĂU

**Head of Department
(signature)**

Ş.L.dr.ing. Andra TĂMAŞ
Conf.dr.ing. Andrea
KELLENBERGER

Date of approval in the Faculty Council ¹⁰

**Dean
(signature)**

Ş.L.dr.ing. Mircea Laurenţiu DAN

⁹ The graduation qualification criteria shall not be explained.

¹⁰ The endorsement is preceded by the discussion of the board's view of the study program on the discipline record.