



DEGREE CURRICULUM

INDUSTRIAL CHEMICAL LEGISLATION

Coordination: PARE BUSTO, MARC

Academic year 2022-23

Subject's general information

Subject name	INDUSTRIAL CHEMICAL LEGISLATION			
Code	102349			
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Character	Modality
	Not informed	3	COMPULSORY	Attendance-based
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	Activity type	PRALAB	PRAULA	TEORIA
	Number of credits	0.4	2.6	3
	Number of groups	1	1	1
Coordination	PARE BUSTO, MARC			
Department	COMPUTER SCIENCE AND INDUSTRIAL ENGINEERING			
Teaching load distribution between lectures and independent student work	60 hours: face-to-face training 90 hours: Independent learning			
Important information on data processing	Consult this link for more information.			
Language	Catalan			
Distribution of credits	3 Theory 3 Practice			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
PARE BUSTO, MARC	marc.pare@udl.cat	3	
SOLE FERRER, MARIA MERCE	mariamerce.sole@udl.cat	3	

Learning objectives

- Know the regulatory framework that affects the engineering profession, in the industrial, construction, machinery and installations, and safety fields.
- Recognize, identify and manage the main industrial and safety regulations.
- Interpret and apply industrial legislation in cases and representative examples in an industrial environment.
- Know the implementation of safety at work management systems.
- Know the specific regulations related with the chemistry industry.

Competences

Basic

B01 That students have demonstrated to possess and understand knowledge in an area of study that starts from the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that imply knowledge coming from the vanguard of his/her field of study.

B02 That students know how to apply their knowledge to their work or vocation in a professional manner and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.

B03 That students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical issues.

B04 That students can transmit information, ideas, problems and solutions to a specialized and non-specialized public.

B05 That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

Transversal

CT1. To develop a proper understanding and oral and written expression of Catalan and Spanish.

CT2. To develop meaningful command of a foreign language, especially English.

CT3. To implement new technologies and technologies of information and communication.

CT4. To apply basic knowledge of entrepreneurship and professional environments.

CT5. To apply essential notions of scientific thinking.

General competences

CG3. To synthesize basic and technological subjects, which enable them to learn new methods and theories, and provide them with versatility to adapt to new situations.

CG4. To solve problems with initiative, make decisions, creativity, critical reasoning and to communicate and transmit knowledge, skills and abilities in the field of Industrial Chemical Engineering.

CG5. To carry out measurements, calculations, valuations, appraisals, surveys, studies, reports, work plans and other analogous work.

CG6. To implement specifications, regulations and mandatory rules.

CG7. To analyze and assess the social and environmental impact of technical solutions.

CG8. To apply the principles and methods of quality.

CG10. To work in a multilingual and multidisciplinary environment.

CG11. To understand and apply the necessary legislation in the exercise of the profession of Industrial Technical Engineer

Specific competences

CE20. To analyze, design, simulate and optimize processes and products.

CE22. To design, manage and operate simulation, control and instrumentation procedures of chemical processes.

Subject contents

BLOCK 1 – Chemical Legislation

Topic 1 – Risk Assessment

Topic 2 – Safety at work

Topic 3 – General risk identification and assessment

Topic 4 – Industrial hygiene

Topic 5 – Chemical agents. carcinogens

Topic 6 - Physical agents

Topic 7 – Biological agents

Topic 8 – Safety in the chemical industry

Topic 9 – REACH Regulation

Topic 10 – CLP Regulation

BLOCK 2 – Industrial Legislation

Topic 1 – Attributions

Topic 2 – Legislation and regulations

Topic 3 – Industry and Activity

Topic 4 – Construction

Topic 5 – Installations and Industrial Regulations

Topic 6 – Patents

Topic 7 – CE marking of machines and products

Topic 8 – Engineering

Methodology

- Master classes for content exposure.
- Preparation and implementation of activities and practical exercises, individually and in groups, evaluable for the final grade.
- Learning based on the case method, elaborating practical cases where it is necessary to apply theoretical knowledge.
- Autonomous study work, carrying out individual and group activities, searching for information and developing the tasks of the practical cases.
- Presentation of the results of the practical exercises through the delivery of written documentation.
- Face-to-face sessions of exhibition and defense of the work carried out.

All sessions will be face-to-face.

Development plan

Week	Monday date	Topic	Lecturer	Observations
1	06/02/2023	Q.1 Risk Assessment / L.1 Attributions	Mercè/Marc	Course start tuesday 7 february, 17.10h
2	13/02/2023	Q.2 Safety at work / L.2 Legislation	Mercè/Marc	
3	20/02/2023	Q.2 Safety / L.3 Industry and activity	Mercè/Marc	
4	27/02/2023	Q.3 Risks / L.3 Industry and activity	Mercè/Marc	
5	06/03/2023	Q.4 Hygiene / L.4 Construction	Mercè/Marc	
6	13/03/2023	Q.5 Chemical agents / L.4 Construction	Mercè/Marc	

7	20/03/2023	Q.6 Physical agents / L.5 Installations	Mercè/Marc	Thursday 23 march student holiday
8	27/03/2023			Tuesday 28 march, 15.00 to 17.00h 1st partial A02
	03/04/2023			Holidays
9	10/04/2023	L.5 Installations	Marc	Tuesday 11 april holiday
10	17/04/2023	Q.7 Biological agents / L.5 Installations	Mercè/Marc	
11	24/04/2023	Q.8 Safety at chemical industry / L.5 Installations	Mercè/Marc	Thursday 27 april student holiday
12	01/05/2023	Q.8 Safety at chemical industry / L.6 Patents	Mercè/Marc	Monday 1 may holiday
13	08/05/2023	Q.9 REACH / L.7 CE mark	Mercè/Marc	Friday 12 may institutional party EPS
14	15/05/2023	Q.10 CLP / L.8 Engineering	Mercè/Marc	
15	22/05/2023	Q.11 Conclusion	Mercè/Marc	25 may, last lesson day
16	29/05/2023			Exams week
17	05/06/2023			Tuesday 6 june, 15.00 to 17.00h 2nd partial exam A02
18	12/06/2023			Exams week
19	19/06/2023			Tutorships
20	26/06/2023			Thursday 29 june, 15.00 to 17.00h, recovery exam A07

Evaluation

A continuous assessment model will be applied in order to weigh the follow-up activities and the exams, with the following scale:

- 30% first partial exam
- 20% follow-up exercises (block 1)
- 30% second partial exam
- 20% follow-up exercises (block 2)

In order to pass the course it is necessary to have taken both partial exams.

The students who do not opt for continuous evaluation must pass the recovery exam, and submit a paper for each block, with the following scales:

- 30% paper for block 1
- 30% paper for block 2
- 40% final exam

Bibliography

- Updated legislation and regulations of the different subject contents.
- Instituto Nacional de Seguridad y Salud en el Trabajo. <http://www.insht.es/>
- Generalitat de Catalunya. Seguretat i salut laboral. http://treball.gencat.cat/ca/ambits/seguretat_i_salut_laboral/