



Universitat de Lleida

# DEGREE CURRICULUM

# **INDUSTRIAL LEGISLATION AND INTEGRATED MANAGEMENT**

Coordination: ALBAREDA SOTERAS, XAVIER

Academic year 2019-20

## Subject's general information

Subject name	INDUSTRIAL LEGISLATION AND INTEGRATED MANAGEMENT			
Code	102490			
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Character	Modality
	Bachelor's degree in Industrial Organization and Logistics Engineering	3	COMPULSORY	Attendance-based
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	Activity type	PRAULA		TEORIA
	Number of credits	3		3
	Number of groups	1		1
Coordination	ALBAREDA SOTERAS, XAVIER			
Department	COMPUTER SCIENCE AND INDUSTRIAL ENGINEERING			
Teaching load distribution between lectures and independent student work	Lecture activities: 60 hours Independent study work: 90 hours			
Important information on data processing	Consult <a href="#">this link</a> 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
ALBAREDA SOTERAS, XAVIER	xavier.albareda@udl.cat	4	
SOLE GUSTEMS, MIQUEL	miquel.sole@udl.cat	2	

## Learning objectives

### Industrial legislation

- Know the Spanish regulatory system in the industrial and security areas.
- Recognize, identify and manage the main industrial and safety regulations.
- Ability to interpret and apply industrial legislation in representative cases and examples in an industrial environment.

### Industrial management

- Know the implementation of quality management systems, environment and PRL
- Perform the integration of the previous systems, in a single system.
- Know the techniques of innovation and creativity, with capacity for implementation.

## Competences

### Basic

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.

### General competences

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.

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 Organization Engineer

## Specific competences

CE17. To recognize the organisational structure and the functions of a Project Office.

CE21. To acquire capacity to manage human resources and risk prevention and safety at work.

CE28. To acquire capacity to design and optimize industrial plants and productive processes.

## Transversal

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

## Subject contents

### 1. Regulation and ordering

Regulatory regulation in Spain

European Legislation European Directives

State Legislation

Autonomic legislation

Local regulations

Law, Decree Law, Decree, Ordinances

### 2. Initial regulatory aspects

Standardization, approval, accreditation, certification.

### 3. Licenses of activities and works.

Basic industrial urbanism.

Urban compatibility certificate

Prevention and control of activities law

Licenses of works (linked with activities)

### 4. Regulation linked to environmental licenses.

RSCIEI and CTE (restricted to industrial casuistry)

Serious accidents

Industrial waste

Soil contamination

Air pollution and odor

Water pollution and discharges

Acoustic pollution

### 5. Industrial safety regulations

electrical s installations of high tension

Low-voltage electrical installations

Installation of gaseous fuels

oil installations

Storage facilities for chemical products

Pressure equipment installations

Refrigeration installations

Lifting equipment installations

## **6. Machine safety**

Manufacturing, adaptation, verification

Applicable casuistry. Schematic procedure.

## **7. CE Marking**

Raw materials and manufactured products

Free movement

Labeled. Content

Obligations and responsibilities

## **8. Industrial Property**

Patents

Utility models

Brands

Logos

## **9. Management areas**

### **9.1. Quality management**

General requirements of the UNE-EN ISO 9001: 2008 standard

Implementation process

Documentation control

Certification

EFQM excellence model

Quality costs

### **9.2. The environmental management**

General requirements and environmental policy

Planning of the implantation

Environmental legislation, standard UNE-EN ISO 14001: 2004 and the European Regulation (EMAS II) of Management (761/2001)

The initial environmental review in the SGA

Planning, implementation and operation of the GHS

Verification and certification of the SGA

9.3. The management of safety and prevention of occupational risks.

The law of prevention of occupational risks

The preventive action

Organization of prevention

The OHSAS 18001 standard. The ILO guidelines and other models

The certification.

9.4. The management of research, development and innovation.

Definition and basic concepts of I + D + I

The management of R + D + I projects according to the UNE 166001 standard

The management of R & D + I in the company according to the UNE 166002 standard

The certification process

## **10. Implementation and development of the integrated management system**

10.1. Process management.

The mission, vision and strategy of the company

The process architecture of the company

The measure of the effectiveness of the process: the control of processes

The definition of the management system of the company

10.2. Requirements of the integrated management system. Management models: ISO 9001, ISO 14001, OHSAS 18001 and UNE 166001/2 standards

10.3. Design and implementation of the integrated management system of the company

10.4. Audits in the SIG

## Methodology

The development of the subject is based on 3 actions:

### **1) Master classes**

Presentation of the concepts, principles and fundamental relationships of each topic

Statement of examples that illustrate its application

### **2) Problems**

Discussion and resolution of exercises, problems and applications related to the concepts of each topic.

Basically work on the problems proposed in the collection of problems of the subject

### **3) Practices (Exercises - problems)**

Practical realization of the concepts achieved

## Development plan

Week	methodology	Theme	classroom hours	autonomous work hours
1	Master class Problems	1. Regulation and ordering 2. Initial regulatory aspects	4	6
2	Master class Problems	3. Licenses of activities and works.	4	6
3	Master class Problems	4. Regulation linked to environmental licenses. (1)	4	6
4	Master class Problems	...4. Regulation linked to environmental licenses. (2)	4	6
5	Master class Problems	5. Industrial safety regulations (1)	4	6
6	Master class Problems	...5. Industrial safety regulations (2)	4	6
7	Master class Problems	...5. Industrial safety regulations (3)	4	6
8	Master class Problems	6. Machine safety	4	6
9	Master class Problems	7. CE Marking	4	6
10	Master class Problems	8. Industrial Property	4	6
11	Master class Problems	9. Management areas (1)	4	6
12	Master class Problems	...9. Management areas (2)	4	6
13	Master class Problems	10. Implementation and development of the integrated management system (1)	4	6
14	Master class Problems	...10. Implementation and development of the integrated management system (2)	4	6
15	Tutorials		4	6
		TOTAL	60	90

## Evaluation

Continuous assessment of the subject throughout the course (compulsory attendance > 90%)

Evaluation. Weight:

Exercises 35%

Practical integrative work 40%

Partial deliveries. fifteen%

Oral defense of work 10%

Students who renounce continuous assessment will adjust to the scheduled exam calendar, in addition to the presentation of the work practical integrator

Evaluation. Weight:

1P 30% Exam

2P 30% exam

Practical integrative work 40%

## Bibliography

### **BASIC:**

Technical regulations and safety regulations to be studied during the course.

AENOR. (2008). UNE-EN ISO 9001: 2008. Quality management systems. Requirements (ISO 9001: 2008)

AENOR. (2004). UNE-EN ISO 14001: 2004 / AC: 2009. Environmental management systems. Requirements with guidance for use. (ISO 14001: 2004 /

Cor 1: 2009)

EC. 82009. Regulation (EC) no. 1221/2009 of the European Parliament and of the Council. Voluntary participation of organizations in a system

Community environmental management and audit (EMAS)

OHSAS. (2007). OHSAS 18001: 2007. Occupational safety and health management systems

AENOR. (2005). UNE 66177: 2005. Management systems. Guide for the integration of management systems

CIDEM (Center for Innovation and Business Development). 2004. Integrated management systems. Generalitat of Catalonia. work Department

and Industry. ISBN 84-393-6388-5

CIDEM (Center for Innovation and Business Development). 2005. The Systematization of innovation: standards of the UNE 166,000 R & D + I series.

Generalitat of Catalonia. Department of Labor and Industry. ISBN 84-393-6690-6

### **COMPLEMENTARY:**

The one that is indicated of each subject during the course.

## Adaptations to the methodology due to COVID-19

Incorporation of additional tools (video, video conferencing ...) according to the case and needs

## Adaptations to the evaluation due to COVID-19

Replacement of the oral presentation initially planned, by video-recorded presentation.