

# PRACTICALS OF LEATHER PROCESSES AND TRAINING IN COMPANY

**COORDINATION** 

**ACADEMIC YEAR** 

**CIATEC** 

2023-2025

# SUBJECT GENERAL INFORMATION

Subject name	PRACTICALS OF LEATHER PROCESSES AND TRAINING IN COMPANY				
Code	SUMSCH-SUB1				
Typology	Summer School. Continued evaluation.				
Course number of credits (ECTS)	3				
Type of activity, credits, and groups	Degree	Course	Character	Modality	
	Joint Master Degree in Leather Technology	1	Compulsory	Blended learning	
Coordination	Aguilar Ruiz, Benjamín				
University	CIATEC				
Language	English				

# LEARNING OBJECTIVES

- 1. To understand in a practical and functional way the concepts and learning achieved in the leather tanning process for automotive upholstery.
- 2. To know in the industry different ways in which technological objectives are achieved and technical problems and contextual factors are solved.
- 3. To understand the real scope of leather production and environmental management.

## **LEARNING OUTCOMES**

#### **Basic**

CB6 Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.

CB7 That students know how to apply the knowledge acquired and their ability to solve problems in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.

CB10 That students have the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

#### General

CG1. Appropriately apply mathematical, analytical, scientific, instrumental, technological and management aspects.

CG2 Technically and economically manage projects, facilities, plants, companies and technology centres.

CG3. Research, develop and innovate.

#### **Transversal**

CT1 Communicate clearly and precisely orally and in writing in English

CT2 Efficiently use digital technologies in their professional field

CT3 Propose innovative, creative and entrepreneurial solutions in situations typical of the professional field

CT4 Evaluate the sustainability and social impact of the proposed proposals and act with ethical, environmental and professional responsibility

CT5 Apply the gender perspective to the functions of the professional field

## **Specific**

CE4. Apply theories and principles of leather engineering in order to analyze complex situations and make decisions using engineering resources

CB9 That students know how to communicate their conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way.

CE11. Apply the necessary legislation in the field of leather engineering.

# SUBJECT CONTENT

# 1. LEATHER MANUFACTURING

- L1.1 Beamhouse and tanning processes
- L1.2 Crust leather processes
- L1.3 Finishing leather processes

#### 2. QUALITY AND CULTURE IN THE AUTOMOTIVE INDUSTRY

- L2.1 Quality management systems in the Automotive Industry
- L2.2 Automotive culture
- L2.3 Engineering changes and implementation of improvements, substitutions, extensions, equipment, installations
- L2.4 Process followed by the new programs for their entry and stabilization in production
- L2.5 Critical factors of quality in raw material and in the process

#### 3. EVALUATIONS AND ESSAY

- L3.1 Laboratory tests on raw materials, in-process and finished products, as well as at their different levels: studies, development, initial samples, standard production
- L3.2 Floor tests and evaluations of materials, preparations, supplies and hides
- L3.3 Follow-up to special batches

#### 4. AUTOMOTIVE LEATHER GOODS

- L4.1 Automotive Leather Goods
- L4.2 Automotive Leather Goods

#### 5. THE AUTOMOTIVE LEATHER INDUSTRY

- L5.1 Faults and/or frequent problems of the raw material, of the process, of the product
- L5.2 Common and/or serious errors in the handling and use of leather by the manufacturer
- L5.3 Needs and/or faults without a current solution, both technological and material technological challenges
- L5.4 Reality of sustainability
- L5.5 Work and social context
- L5.6 Future, industry prospects

#### 6. LEARNINGS, SCENARIOS

- L6.1 Coincidence of reality with training or curriculum
- L6.2 Educational and content needs
- L6.3 Possible lines of study and development
- L6.4 Job opportunities

# **METHODOLOGY**

#### THEORY AND PRACTICAL CLASSES

The practices will be carried out in the Leather Laboratory, in tanneries of the private industry, in physical testing and chemical analysis laboratories, both of services and private companies, as well as companies that manufacture leather articles for use in automotive upholstery. The accompaniment, exhibition, and instruction will be in charge of professors and experts from the leather industry, with the explanation of concepts, materials, and work plan.

Support material: Course notes and relevant bibliography.

#### **EXERCISES AND SELFSTUDY**

Overview: Individual exercises, self-study and individual study.

Supporting material: Course notes and relevant bibliography

Deliverable: Exercises and practices to deliver at the end of each unit.

#### WRITTEN EXAMS

General description: 2 written exams of the different topics addressed in the classes.

#### **EVALUATION**

Exercises	10%	
Practices	40%	
Exam 1	25%	
Exam 2	25%	