



ENGINEER SKILLS IN COMPANY

COORDINATION
ASWORTH, CIAN

ACADEMIC YEAR
2023-2025

SUBJECT GENERAL INFORMATION

Subject name	ENGINEER SKILLS IN COMPANY			
Code	3SEM-SUB3			
Typology	3rd semester. Continued evaluation.			
Course number of credits (ECTS)	9			
Type of activity, credits, and groups	<i>Degree</i>	<i>Course</i>	<i>Character</i>	<i>Modality</i>
	<i>Joint Master Degree in Leather Technology</i>	<i>1</i>	<i>Compulsory</i>	<i>Blended learning</i>
Coordination	ASWORTH, CIAN			
University	ITECH			
Language	English			

LEARNING OBJECTIVES

1. Identify the different types of management; understand the objectives and the unfolding; learn how to better cooperate in a team.
2. Give to the future post graduate students the bases of the different skills needed in order to obtain a job after graduating: how to do an interview, how to look for work...
3. Give to the student the bases of Quality, allowing them to easily fit into a ISO 9001 company. Be able to contribute in controlling quality and in researching permanent improvement within a company.
4. Put forward complementarity between different types of knowledge, as well as the richness and assets of social and engineering sciences.

LEARNING OUTCOMES

Basic

CB7 That students have the learning skills that allow them to continue studying in a way that will be largely self- directed or autonomous.

CB8 That students are able to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments.

General

CG04. Lead, plan and supervise multidisciplinary teams.

Transversal

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

CE10. Design strategic planning and apply it to production, quality and environmental management systems in the field of leather engineering.

SUBJECT CONTENT

1. HR MANAGEMENT

- Etymology
- Methodology, vision, basic principles
- Implementing, permanent parties, strategy, resources, processes
- Know how behaviour
- Structure of French companies
- The internal operating environment of manager
- The external operating environment of manager
- Succeeding in the first 100 days: analyse and understand the company
- Philosophy and psychology
- Role playing games
- Demotivation sources
- Managing time
- Decision taking
- Bases of professional relations
- Meetings
- Delegating
- Refusing interviews
- Employing process
- Understanding when there is a problem in a company

2. PREPARATION FOR A PROFESSIONAL CAREER - EMPLOYMENT

- 2.1.Strategic benchmarks in employment search
- 2.2.Recruitment basis and example of a recruitment procedure
- 2.3.Small recruitment memento: training questions
- 2.4.Memento: communication training and professional stress management
- 2.5.Interview and recruitment simulation training exercise

3. QUALITY

3.1.QUALITY, APPROACH AND COMPANY CERTIFICATION

- Quality: precisions over concepts and DEFINITIONS
- Approaches in quality
- ISO 9001 company certification

3.2.QUALITE IN CONCEPTION AND IN PRODUCTION

- Quality in conception and developing new products
- Quality in production: control and quality assurance for processes
- Statistics and control of processes

3.3.CONTINUOUS IMPROVEMENT: CORRECTIVE AND PREVENTIVE APPROACH

- Principles and means
- Corrective approaches: problem solving
- Preventive approach: AMDEC

4. WORK ENVIRONMENT OF ENGINEERING

4.1.History of the Idea of Progress

- Humanism and finality

- The end of History
- Technophobia and post-humanism

4.2. Work Philosophy

- Work and Leisure
- Work and Identity
- Work and Suffering

4.3. Psychology of work relations

- Authority figures
- Affects
- Motivations

4.4. Cartography of the career path of an engineer

- Youth
- Prime
- Maturity

4.5. System theory

- Systems and complexity
- Environment
- Tools

4.6. Management of Innovation

- Innovation factors
- Complete and integrated solutions
- Sustainable competitiveness

4.7. The normative principle

- What is and what should be
- Normalisation ethics

4.8. Frugal innovation

- Context
- the alternative

4.9. The engineer and sustainable development

- Elementary
- Conception, eco-conception, bio-sourcing
- A new type of engineering?

METHODOLOGY

THEORY CLASSES

Expository lectures: by the teacher, with the explanation of concepts, materials and work plan.

Support material: Course notes and relevant bibliography.

EXERCISES AND SELFSTUDY

Supervised exercise sessions by the teacher

General description: Individual exercises, self-learning and individual study.

Support material: Course notes and relevant bibliography.

Deliverable: report to deliver at the end.

EVALUATION

Exercises	10%
Exam 1	35%
Exam 2	35%