

1. BASIC INFORMATION

Subject	Project: Organisation in Smart Industry II
Degree	Bachelor's Degree in Industrial Organisation Engineering
School/Faculty	School of Engineering Sciences and Design
Course Year	3rd Year
ECTS	9
Type	Compulsory
Language	English
Modality	On-site / On-line
Semester	S2
Academic Year	2024-25
Lead Instructor	Ernesto Doménech Herrero
Instructors	Antonio Miranda y Ernesto Doménech Herrero

2. INTRODUCTION

In this course, students will carry out a real project in collaboration with DHL Supply Chain Iberia, applying knowledge acquired in other subjects such as 'Competency Development'. The project will be designed by a lead instructor with the support of specialist lecturers from related subjects, with the aim of enabling students to put into practice the knowledge gained from the curriculum. The project will have a common basic framework defined by the indicated content, although additional content may be included if required by the specific project. Students will be able to propose the specific area of application to which they will apply the project.

For the final evaluation of the project, a detailed report must be submitted describing the work carried out and, where applicable, the prototype developed. Additionally, an oral defence of the project will be required in a public session before at least the course coordinator. Related subject lecturers may also be present.

3. LEARNING OUTCOMES

Skills

- HAB07: Utilise basic knowledge of production and manufacturing systems in industrial organisation processes.
- HAB12: Apply design and management techniques and tools to the production and operations of an industrial organisation.
- HAB13: Apply knowledge of quality management, environmental management, and prevention systems within the scope of industrial organisation engineering.

- HAB15: Manage project processes in the field of engineering. Realizar un proyecto en equipo que incluya la resolución eficaz de problemas de organización industrial en la Industria Inteligente, ya sean, de diseño o gestión de operaciones, logística o Supply Chain Management.

Competencies

- CP04: Organise, manage, and defend a project in the field of industrial organisation engineering.
- CPT01: Create new ideas and concepts from known ideas and concepts, reaching conclusions or solving problems, challenges, and situations in an original way within the academic and professional environment.
- CPT02: Communicate messages (ideas, concepts, feelings, arguments) both orally and in writing, strategically aligning the interests of the various stakeholders involved in communication within the academic and professional environment.
- CPT04: Influence others to guide and direct them towards specific objectives and goals, considering their viewpoints, especially in professional situations derived from today's volatile, uncertain, complex, and ambiguous (VUCA) environments.
- CPT05: Collaborate with others to achieve a shared academic or professional objective, actively participating with empathy, exercising active listening, and showing respect to all members.
- CPT06: Integrate analysis with critical thinking in a process of evaluating different ideas or professional possibilities and their potential for error, based on evidence and objective data, leading to effective and valid decision-making.
- CPT07: Adapt to adverse, unexpected situations that cause stress, whether personal or professional, overcoming them and even turning them into opportunities for positive change.
- CPT08: Demonstrate ethical behaviour and social commitment in professional activities, as well as sensitivity to inequality and diversity.

4. CONTENTS

The course covers the following content:

- Operations management
- Logistics or Supply Chain Management in Smart Industry.
- Economic analysis.
- Continuous improvement and sustainability management.

5. TEACHING AND LEARNING METHODOLOGIES

The following teaching and learning methodologies will be applied:

- Lectures
- Case method
- Cooperative learning
- Problem-based learning
- Project-based learning
- Laboratory-based learning (laboratory practices, workshop practices, simulation environments)

- Gamification
- Field experiences (practical external visits)

6. LEARNING ACTIVITIES

The following learning activities will be carried out, with the corresponding student time commitment:

On-site Modality:

Learning Activity	Hours
Lectures	22.5
Problem-solving and case studies	7.5
Case studies and field studies	7.5
Integrative projects	95
Debate and colloquium	12
Learning contract (definition of interests, needs, and objectives)	3
Independent study	54.5
Tutorials	20
Knowledge tests	3
TOTAL	225

On-line Modality:

Actividad formativa	Número de horas
Virtual classes	7.5
Lectures	7
Problem-solving	7.5
Case studies	7.5
Integrative projects	75
Virtual forum (debate and colloquium)	12
Learning contract (definition of interests, needs, and objectives)	3
Study of content and supplementary documentation (independent work)	82.5
Virtual tutorials	20
Virtual knowledge tests	3
TOTAL	225

7. ASSESSMENT

The following assessment systems and their weight on the total course grade are detailed:

On-site Modality:

Assessment System	Weight
Tests to evaluate attitudes (attitude assessment rubrics, class participation)	10%
Self-assessment and peer assessment tests (case studies, learning contract, learning objectives)	30%
Memorias de proyectos (proyectos integradores, trabajo fin de grado)	35%
Project reports (integrative projects, final degree project)	25%

On-line Modality:

Sistema de evaluación	Peso
Virtual tests to assess theoretical/practical content objectives (objective tests, oral presentations, written presentations, case studies/problem-solving, debates, simulation tests)	60%
Tests to evaluate attitudes (attitude assessment rubrics, class participation)	5%
Self-assessment and peer assessment tests (learning contract, learning objectives)	5%
Project reports (integrative projects, final degree project)	30%

When accessing the course on the Virtual Campus, you will be able to consult in detail the evaluation activities you need to complete, as well as the submission deadlines and the assessment procedures for each of them.

If a student is caught or suspected of copying in any test or assessable activity (e.g., copying from peers or using AI tools), and the student cannot demonstrate otherwise or prove they possess the knowledge and competencies associated with the test or activity, it will be graded with a score of 0. Higher sanctions may be considered according to the University's General Conduct Regulations.

7.1. Ordinary Examination

On-site Modality:

The grade for each knowledge test (whether partial or final) must be $\geq 5/10$ to pass the course and to be averaged with the rest of the tests and assessable activities. This limit may be increased at the instructor's discretion, depending on the nature of the course.

The minimum on-site attendance required to sit the final knowledge test for the Ordinary Examination is 50%, which may be increased at the instructor's discretion depending on the nature of the course and activity. Cases that do not meet this requirement, except for justifications with evidence approved by the University, will only be able to access the Extraordinary Examination.

Virtual (hyflex) attendance at sessions is only allowed for justified and approved cases by the University; otherwise, it will be recorded as an absence.

Online Modality:

The grade for each knowledge test (whether partial or final) must be $\geq 5/10$ to pass the course and to be averaged with the rest of the tests and assessable activities. This limit may be increased at the instructor's discretion, depending on the nature of the course.

The instructor must establish a minimum of 4 and a maximum of 8 sessions per course for mandatory synchronous activities. These sessions will be used for practical activities or oral presentations where attendance is important for the student's learning process. Non-attendance at these activities will result in a score of 0 in the associated assessable activities, except for justifications with evidence approved by the University.

At the end of each teaching unit, the instructor will provide a multiple-choice test with approximately 15-20 questions on the unit's content as a pedagogical support. The test may be assessed as an activity at the instructor's discretion or not be assessed.

7.2. Extraordinary Examination

On-site Modality:

The grade for each knowledge test (whether partial or final) must be $\geq 5/10$ to pass the course and to be averaged with the rest of the tests and assessable activities. This limit may be increased at the instructor's discretion, depending on the nature of the course.

In the Extraordinary Examination, the knowledge test will include all course content, regardless of whether a partial test has been passed during the semester.

Online Modality:

The grade for each knowledge test (whether partial or final) must be $\geq 5/10$ to pass the course and to be averaged with the rest of the tests and assessable activities. This limit may be increased at the instructor's discretion, depending on the nature of the course.

In the Extraordinary Examination, the knowledge test will include all course content, regardless of whether a partial test has been passed during the semester.

8. SCHEDULE

On-site Modality:

This section provides the schedule with the deadlines for the course's assessable activities:

Assessable Activities	Date
Work session with DHL Supply Chain Iberia	Weeks 1-2
Work session with DHL Supply Chain Iberia	Week 4
Work session with DHL Supply Chain Iberia	Week 6
Mid-term evaluation (pitch)	Week 8
Work session with DHL Supply Chain Iberia	Week 13
Preliminary pitch	Week 16
Final presentation and defence	Weeks 17-20

This schedule may be subject to changes due to logistical reasons for the activities. Any changes will be notified to the student in a timely manner.

Online Modality:

This section provides the schedule with the deadlines for the course's assessable activities:

Assessable Activities	Date
Work session with DHL Supply Chain Iberia	Weeks 1-2
Work session with DHL Supply Chain Iberia	Week 4
Work session with DHL Supply Chain Iberia	Week 6
Mid-term evaluation (pitch)	Week 8
Work session with DHL Supply Chain Iberia	Week 13
Preliminary pitch	Week 16
Final presentation and defence	Weeks 17-20

This schedule may be subject to changes due to logistical reasons for the activities. Any changes will be notified to the student in a timely manner.

9. BIBLIOGRAPHY

The reference work for following the course is:

- The Guide to the Project Management Body of Knowledge (PMBOK® Guide). Project Management Institute Inc.
- Agile Scrum Fundamentals. Nader K. Rad, Frank Turley. Management Plaza.
- Agile Practice Guide. Project Management Institute Inc.
- Project Management JumpStart. Heldman K. Wiley Publishing Inc.
- Manners-Bell, John. (2019). Technical Note on the Future of Logistics. Inter-American Development Bank.
- ANFAC 2020 Logistics Valuation Report
- ECG-IRU Joint statement on e-CMR

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

The Educational Guidance and Diversity Unit (ODI) offers support to our students throughout their university life to help them achieve their academic goals. Other pillars of our work include the inclusion of students with specific educational support needs, universal accessibility on the various university campuses, and the equalisation of opportunities.

The Unit offers students:

Support and monitoring through personalised plans and counselling for students who need to improve their academic performance.

In terms of attention to diversity, non-significant curricular adjustments are made, i.e., at the methodological and evaluation levels, for students with specific educational support needs, thereby ensuring equal opportunities for all students.

We offer students various extracurricular training resources to develop different competencies that will enrich their personal and professional development.

Vocational guidance by providing tools and counselling to students with vocational doubts or those who believe they have chosen the wrong degree.

Students who need educational support can write to us at:

orientacioneducativa.uev@universidadeuropea.es

11. SATISFACTION SURVEYS

Your opinion matters!

Universidad Europea encourages you to participate in satisfaction surveys to identify strengths and areas for improvement regarding the faculty, the degree programme, and the teaching-learning process. The surveys will be available in the survey section of your virtual campus or via your email.

Your feedback is essential for improving the quality of the degree programme.

Thank you for your participation.