

1. BASIC INFORMATION

Course	Intelligent systems and knowledge representation
Degree program	Bachelor's Degree in Computer Engineering
School	Architecture, Engineering and Design
Year	Second
ECTS	6
Credit type	Compulsory
Language(s)	English
Delivery mode	On Campus / on line
Semester	1
Academic year	2025-2026
Coordinating professor	MORENO MARTINEZ, CARLOS
Professor	PAGES OGILVIE, CARLOS JAIME

2. PRESENTATION

The course enables students to function effectively in professional contexts, where interpersonal communication and the presentation of ideas are essential. Real situations are practised such as customer-supplier relationships or working in collaborative teams. Students learn professional communication techniques, with emphasis on oral presentations adapted to case studies and scenarios such as presentation meetings and project positioning. Work is carried out on the elaboration of contents and proposals with a professional approach, taking care of the structure, style and its adaptation to the needs of users and companies, through design processes applied to projects of the student's professional field.

3. LEARNING OUTCOMES

Knowledge

KN03 Knowledge and application of basic elements of economics and human resource management, project organization and planning, as well as legislation, regulation, and standardization in the field of computer projects, according to the knowledge acquired as established in the specific competencies of the degree.

Skills

SK01 Ability to solve problems with initiative, decision-making, autonomy, and creativity. Ability to communicate and transmit knowledge, skills, and abilities related to the profession of Computer Engineering Technician.

Competences

CP08 Ability to analyze and assess the social and environmental impact of technical solutions, understanding the ethical and professional responsibility of the Computer Engineering Technician's activity.

CP09 Ability to understand the importance of negotiation, effective work habits, leadership, teamwork, and communication skills in all software development environments.

Specific learning outcomes for the subject

Subject-Specific Skills

- Evaluate technological needs in the application domain and existing solutions creatively.
- Manage a software development project using agile methodologies, dividing the work into modules and designing their integration.
- Perform the design and subsequent monitoring of tasks, milestones, and responsibilities derived from project management, providing quality feedback to each team member.
- Analyze the project's contribution to the Sustainable Development Goals (SDGs).
- Develop a desktop software application following the object-oriented programming paradigm that meets technical specifications.
- Use a code repository and version control tool.

4. CONTENT

Communication in the professional environment. Verbal, non-verbal, and written communication. Emotional intelligence in interpersonal relationships. Time and stress management. Introduction to NLP as a method of persuasion. The success of change: The ability to adapt. Understanding the environment, change management, adaptability, flexibility, and resilience.

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

- Master class
- Problem-based learning
- Project-based learning
- Workshop-based learning

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Campus-based mode:

Learning activity	Number of hours	Time in Class	Use of IA
Masterclasses	10	10	Not allowed
Practical application masterclasses	18	18	Not allowed / Suggested
Problem solving	18	16	Not allowed / Suggested
Research and projects	20	0	Allowed
Workshop and/or laboratory activities	10	10	Allowed
Autonomous work	68	0	Not allowed / Suggested
Debates and colloquiums	4	4	Not allowed
Face-to-face assessment tests	2	2	Not allowed
TOTAL	150	60	

* The teacher may specify a different use for a specific activity within the subject if he/she deems it appropriate and advises the students accordingly.

Online mode:

Learning activity	Number of hours	Virtual	Use of IA
Multimedia didactic resources	10	0	Not allowed
Synchronous virtual classes	18	18	Not allowed / Suggested
Problem solving	18	0	Not allowed / Suggested
Project development	20	0	Allowed
Synchronous activities in workshops and/or virtual labs	10	10	Allowed
Study of contents and complementary documentation (Autonomous Work)	68	0	Not allowed / Suggested
Virtual forum	4	0	Not allowed
Virtual assessment tests	2	2	Not allowed
TOTAL	150	30	

* The teacher may specify a different use for a specific activity within the subject if he/she deems it appropriate and advises the students accordingly.

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Campus-based mode:

Assessment system	Weight
Face-to-face assessment tests	30%
Oral presentations	30%
Reports and writings	20%
Case/problem	10%
Learning portfolio	
Performance assessment	10%
Research and projects	
Strategy design work and intervention plans	
Laboratory/workshop practical notebook	

Online mode:

Assessment system	Weight
Face-to-face assessment tests	30%
Oral presentations	30%
Reports and writings	20%
Case/problem	10%
Learning portfolio	
Performance assessment	10%
Research and projects	
Strategy design work and intervention plans	
Laboratory/workshop practical notebook	

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

7.1. First exam period

To pass the course in the first exam period, you must obtain a final course grade of at least 5 out of 10 (weighted average).

In any case, you will need to obtain a grade of at 4.0 in the final exam in order for it to count towards the final grade along with all the grades corresponding to the other activities.

The teacher reserves the right to request an additional test to any of the evaluation tests, in case of doubts about the student's authorship.

In order to pass the course, attendance is compulsory and, therefore, the minimum number established for the course by the teacher must be reached. In this case it will be 50%.

7.2. Second exam period

To pass the course in the second exam period, you must obtain a final grade of at least 5 out of 10 (weighted average).

In any case, you will need to obtain a grade of at 4.0 in the final exam in order for it to count towards the final grade along with all the grades corresponding to the other activities.

The student must deliver the activities not successfully completed in the first exam period after having received the corresponding corrections from the professor, or those that were not delivered in the first place.

8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Assessable activities	Deadline
Participation Activities (individual and group)	Week 1-18
Knowledge Test (individual)	Week 10
Mini-project delivery (group) and Checkpoint	Week 17-18
Global Knowledge Test	Week 18

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

9. BIBLIOGRAFÍA

The recommended Bibliography is:

1. *Emotional Intelligence: Why It Can Matter More Than IQ*
Author: Daniel Goleman
 - *Classic foundational book* introducing the concept of EQ.
 - Covers self-awareness, self-regulation, motivation, empathy, and social skills.
 - Level: Intermediate, accessible for undergrads.
2. *The Emotionally Intelligent Workplace*
Authors: Cary Cherniss & Daniel Goleman
 - Focuses on how emotional intelligence works in organizational and educational settings.
 - Includes case studies and practical implications.
 - Level: Academic and practical mix.
3. *Everyone Communicates, Few Connect: What the Most Effective People Do Differently*
Author: John C. Maxwell
 - Focuses on how to build connection, not just deliver messages.
 - Very engaging and full of examples.
 - Level: Easy to read, great for undergraduate students.
4. *Crucial Conversations: Tools for Talking When Stakes Are High*
Authors: Kerry Patterson, Joseph Grenny, et al.
 - Offers tools for managing high-stress conversations, conflict resolution, and persuasion.
 - Level: Practical and applied, ideal for both personal and professional growth.
5. *Adaptability: The Art of Winning in an Age of Uncertainty*
Author: Max McKeown
 - Explores how individuals and organizations adapt to change.
 - Includes case studies, strategies, and a framework for developing adaptability.
 - Level: Student-friendly, relevant in a fast-changing world.

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

orientacioneducativa@universidadeuropea.es

11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation.

