1. OVERVIEW

Subject area	Digital Transformation Management
Degree	Bachelor's Degree in Computer Engineering
School/Faculty	School of Architecture, Engineering and Design
Year	4º
ECTS	6
Type	Elective
Language(s)	Spanish
Delivery mode	On campus / Online
Semester	S8
Year	2022/2023
Coordinating professor	Ana del Valle Corrales Paredes

2. INTRODUCTION

Digital Transformation Management is an elective subject area, worth 6 ECTS credits, in the area of Software Engineering, which is formed by 42 ECTS credits, 6 of which are elective.

The main objective of the subject area is to educate students on the skills and competences of business management, which they will develop throughout the training programme. The focus will be on mastering the concepts and tools to manage high performance teams, establish specific criteria for decision-making and resolve conflict. The ability to design the organisational strategy, mission and vision of the company and its human resources management will also be encouraged.

The learning will be complemented with case studies and the practical development of a digital transformation plan that allows the student to apply the foundations, methods and techniques learnt over the year.

The Computer Science student will make use of the knowledge acquired in previous subject areas on Software Engineering and Projects to carry out a digital transformation plan.

3. SKILLS AND LEARNING OUTCOMES

Basic skills (CB, by the acronym in Spanish):

CB1: Students have demonstrated knowledge and understanding of a study area originating from general secondary school education, and are usually at the level where, with the support of more advanced textbooks, they may also demonstrate awareness of the latest developments in their field of study.

CB2: Students can apply their knowledge to their work or vocation in a professional manner and possess the skills which are usually evident through the forming and defending of opinions and resolving problems within their study area.

CB3: Students have the ability to gather and interpret relevant data (usually within their study area) to form opinions which include reflecting on relevant social, scientific or ethical matters.

CB4: Students can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.

General skills of the profession (CG, by the acronym in Spanish):

CG5: Ability to design, develop and maintain systems, services and computer applications using software engineering methods as a tool for quality assurance, in accordance with the knowledge acquired as established in section 5 of Annex II of the Spanish Official Gazette (BOE) 12977/2009.

Transversal skills (CT, by the acronym in Spanish):

CT2: Self-confidence: Ability to evaluate one's own results, performance and skills with the self-determination necessary to complete tasks and meet any objectives.

CT10: Initiative and entrepreneurial spirit: Ability to undertake difficult or risky actions with resolve. Ability to anticipate problems, propose improvements and persevere to ensure they are implemented. Willingness to take on and carry out tasks.

CT12: Critical thinking: Ability to analyse an idea, occurrence or situation from different perspectives and adopt a personal viewpoint based on scientific rigour and objective reasoning, rather than intuition.

CT13: Problem solving: Ability to resolve an unclear or complex issue or situation which has no established solution and requires skill to reach a conclusion.

CT14: Innovation/Creativity: Ability to propose and invent new, original solutions that contribute towards improving problem situations, including ideas from other contexts.

Specific skills (CE, by the acronym in Spanish):

CE10. Ability to draw up the technical specifications of a computer installation, complying with the standards and regulations in force.

CE14. Ability to analyse, design, construct and maintain robust, secure and efficient applications, choosing the most appropriate paradigm and programming languages.

CE22. Knowledge and application of software engineering principles, methods and life cycles.

Learning outcomes (RA, by the acronym in Spanish):

RA1. Know the responsibilities and duties of a company’s IT manager.

RA2: Understand the functions of the different IT areas or departments that make up a company, among which is selecting IT suppliers.

RA3. Know the emerging trends and technologies.

RA4. Design a digital transformation plan.

The following table shows how the skills developed in the subject area match up with the intended learning outcomes:

Skills	Learning outcomes
CB1, CB3, CT12, CG5	**RA1.** Know the responsibilities and duties of a company's IT manager.
CB1, CB2, CB3, CT2, CT12, CT13, CT14, CG5, CE10, CE22	**RA2.** Understand the functions of the different IT areas or departments that make up a company, among which is selecting IT suppliers.
CB1, CB3, CT12, CT14, CE22, CG5	**RA3.** Know the emerging trends and technologies.
CB2, CB3, CB4, CT2, CT10, CT12, CT13, CT14, CE10, CE14, CE22, CG5	**RA4.** Design a digital transformation plan.

4. CONTENTS

- Management of information systems
- Emerging technologies
- New technology
- Digital transformation

5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

The types of teaching/learning methods are as follows:

- Lecture.
- Case studies.
- Collaborative learning.
- Problem-based learning.
- Project-based learning.
- Professional Workshop simulation.

6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

On campus:

Learning activity (AF, by the acronym in Spanish)	Number of hours
Lectures, reading on main topics and complementary materials, implementation of activities carried out independently and collectively (including participation in collaborative learning forums).	50
Integrative group work, consisting of participation in debates and seminars, and group implementation of integrative activities, mainly in the classroom.	25
Independent working	50
Tutorials, academic monitoring and assessment, both in the classroom and on the Campus Virtual.	25

Online:

Learning activity (AF, by the acronym in Spanish)	Number of hours
Independent working	50
Independent reading on complementary topics and materials and implementation of activities carried out independently. Online debates and seminars.	50
Integrative group work	25
Tutorials, academic monitoring and assessment	25

7. ASSESSMENT

The assessment systems, plus their weighting in the final grade for the subject area, are as follows:

Assessment method - On-campus	Weighting
Knowledge tests, exams and test	30%
Development of articles, reports or design briefs.	15%-30%
Alternative assessment methods with mind maps, diaries, debates, portfolios and/or peer assessment.	15%-30%
Fieldwork, conferences, visits to companies and institutions will be evaluated based on the interventions in a discussion forum.	0%-10%
Exercises, problems, case studies, designs, simulations and research. Individual Tasks.	15%

Assessment method - Online	Weighting
Knowledge tests, exams, test	60%
Development of articles, reports or design briefs.	10%-20%
Alternative assessment methods with mind maps, diaries, debates, portfolios and/or peer assessment.	10%-20%
Conferences will be evaluated based on the students' participation in a discussion forum.	0%-5%
Exercises, problems, case studies, designs, simulations and research. Individual Tasks.	10%-20%

On the Campus Virtual, when you open the subject area, you will find all the details of your assessable tasks and the deadlines and assessment procedures for each task.

7.1. Ordinary exam period

To pass the subject area in the ordinary exam period, you will need a final grade of at least 5.0 out of 10.0 (weighted average) for the subject area.

In any case, you will need a grade of at least 5.0 in the final test for it to be included in the weighting with the other activities.

7.2. Extraordinary exam period (resits)

To pass the subject area in the ordinary exam period, you will need a final grade of at least 5.0 out of 10.0 (weighted average) for the subject area.

In any case, you will need a grade of at least 5.0 in the final test for it to be included in the weighting with the other activities.

Activities not passed in the ordinary exam period, or those not submitted, must be submitted after receiving the relevant corrections and feedback from the lecturer.

8. DIVERSITY AWARENESS UNIT

Students with special educational needs:

To ensure equal opportunities, curricular adaptations or adjustments for students with special educational needs will be outlined by the Diversity Awareness Unit (UAD, Spanish acronym).

As an essential requirement, students with special educational needs must obtain a report about the curricular adaptations/adjustments from the Diversity Awareness Unit by contacting unidad.diversidad@universidadeuropea.es at the beginning of each semester.

9. STUDENT SATISFACTION SURVEYS

Your opinion matters!

Universidad Europea encourages you to complete our satisfaction surveys to identify strengths and areas for improvement for staff, degrees and the learning process.

These surveys will be available in the survey area of your campus virtual or by email.

Your opinion is essential to improve the quality of the degree. Many thanks for taking part.