

## 1. OVERVIEW

<b>Subject Area</b>	The Data Cycle
<b>Degree</b>	Bachelor's Degree in Business Analytics
<b>School/Faculty</b>	Social and Communication Sciences
<b>Ac. Year</b>	Fourth
<b>ECTS</b>	3 ECTS
<b>Type</b>	Compulsory
<b>Language(s)</b>	Spanish/English
<b>Delivery Mode</b>	On campus
<b>Semester</b>	One (7th)
<b>Academic Year</b>	2025-26
<b>Coordinating professor</b>	Jairo García

## 2. INTRODUCTION

As part of The Data Cycle course, students will learn about the value attached by the business sector to data, and how they are exploited at every stage of the data cycle, from their creation/collection to the final stage when they are manipulated to generate knowledge which is beneficial to the business.

Data are used to generate information and information is used to generate knowledge. Since the processes of data collection and processing are as important as the use, exploitation and sharing of data, information must be accurate and clear and cannot lead a business to draw incorrect conclusions depending on its internal points of view. Students will need to understand that their perspectives as data analysts will be influenced by the type of access of different users and, as a result, they will have to adopt an approach sensitive to these issues.

## 3. SKILLS AND LEARNING OUTCOMES

**Key skills (CB, by the acronym in Spanish):**

- CB3: Students will develop an 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.

**Cross-curricular skills (CT, by the acronym in Spanish):**

- CT6 - Adaptability: Students will be able to accept, consider and integrate different perspectives, adapting their own approach as required by the situation at hand, and to work effectively in ambiguous situations.

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

- CE08: Ability to analyse, integrate and evaluate information from legal sources when needed in the decision-making process.
- CE11 - Ability to assess and apply principles of social responsibility across the business, particularly with a view to promoting environmental management, while acting in line with current legislation and taking advantage to reinforce brand image and enhance productivity.
- CE24: Ability to identify information needs, depending on the stated objectives of the task in question.

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

- RA1. Explore the concept of data and their importance to the business.
- RA2. Understand every stage of the data cycle, from generation to processing.
- RA3. Optimise data management costs.
- RA4. Strategic data processing planning.

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

Skills	Learning outcomes
CB3, CE28, CE32	RA1. Explore the concept of data and their importance to the business.
CB3, CE26, CE28	RA2. Understand every stage of the data cycle, from generation to processing.
CT6, CE27, CE28	RA3. Optimise data management costs.
CT6, CE28, CE32	RA4. Strategic data processing planning.

## 4. CONTENTS

- **Unit 1:** Data Governance or Data Management Planning; Data Management Control.
- **Unit 2:** Data Management Architecture or Architecture: Definition and Design  
Maintenance  
Extension
- **Unit 3:** Data Development or Data Modelling; Analysing and Devising Solutions or Detailed Data Design.  
Data Modelling and Devising a Quality Management Plan.  
Data Implementation
- **Unit 4:** Data Operations Management or DB Support  
Data Technology Management.
- **Unit 5:** Data Security Management.  
Needs and Requirements.  
Security Policies, Standards, Controls and Procedures  
User Administration, Roles, Viewing and Permission

- **Unit 6:** Data Quality Management
  - Data Quality Requirements
    - Data Profile, Analysis and Evaluation
    - KPI's;
    - Business Rules
    - Devising and Implementing the DQM Plan

## 5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Lecture/online conference
- Problem-based learning (ABP, as per the Spanish acronym)

## 6. LEARNING ACTIVITIES

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

Learning activity	Number of hours
Lectures	16
Asynchronous lectures	4
Problem-solving	15
Oral presentations	5
Written reports and essays	15
Independent assignment	20
<b>TOTAL</b>	<b>75</b>

## 7. ASSESSMENT

The assessment methods, plus their weighting in the final grade for the course, are as follows:

Assessment system	Weighting
On-campus knowledge tests	40%
Oral presentations	10%
Reports and written work - Case/problem	40%

On the Virtual Campus, when you open the subject area, you can see all the details of your assessment activities, including the deadlines and assessment procedures for each activity.

Students will need to attend at least 70% of on-campus classes to receive the minimum continuous assessment pass grade.

### 7.1. Ordinary exam period

To pass the course in the ordinary examination period you must obtain a grade of 5.0 or more out of 10.0 in the final grade (weighted average) for the subject area. A minimum score of 5.0 out of 10.0 is also required in the final knowledge test.

### 7.2. Extraordinary exam period (resits)

The assessment method is the same as in the ordinary exam period.

Activities not passed in the ordinary exam period, or those not delivered, must now be delivered after having received the relevant corrections to them by the lecturer.

## 8. TIMELINE

The timeline with delivery dates of assessable activities in the subject area is indicated in this section:

Actividades evaluables	Fecha

The timeline may be subject to modifications for logistical reasons of the activities. Students will be informed of any changes in due time and course.

## 9. BIBLIOGRAPHY

<https://www.damaspain.org/> <https://www.talend.com/> <https://powerbi.microsoft.com/>  
<https://www.tableau.com/> <https://www.sas.com/>

## 10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

The Educational Guidance and Diversity Unit (ODI in Spanish) offers support throughout your time at university to help you with your academic achievement. Other cornerstones of our educational policy are the inclusion of students with special educational needs, universal access in all our university campuses and equal opportunities.

This ODI unit offers students:

1. Support and monitoring through counselling and personalised student plans for those who need to improve their academic performance.
2. Curricular adaptations to uphold diversity, with assistance for those students who require specific educational support, leading to equal opportunities without significant changes to methodology or evaluation.
3. We offer students a range of extracurricular educational resources to reinforce skills which will enhance their personal and professional development.
4. Career guidance by giving tools and advice to any students who have doubts about their career or think that they have chosen the wrong degree.

Students who need educational support can contact us at:

[orientacioneducativa@universidadeuropea.es](mailto:orientacioneducativa@universidadeuropea.es)

## 11. SATISFACTION SURVEYS

Your opinion matters!

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

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

Your opinion is essential to improve the quality of the degree.

Many thanks for taking part.