1. OVERVIEW

Subject area	English
Degree	Bachelor's Degree in Data Science
School/Faculty	School of Architecture and Polytechnic
Year	Fourth
ECTS	6
Type	Optional
Language(s)	English
Delivery Mode	On campus
Semester	Seventh

2. INTRODUCTION

This course focuses on teaching communication skills in English for certain academic objectives. Therefore, the different areas of the language (discourse, grammar, sociolinguistics and situational language) will be centred around real-life situations with a notional-functional learning approach in each student's specific field of study. Based on the Common European Framework of Reference for Languages (CEFR) and the definition of the B2 scale requirements, we will work on improving the following skills: reading, writing, listening and speaking. A strong foundation in grammar and vocabulary will help to improve students' ability to communicate and develop each language skill.

3. SKILLS AND LEARNING OUTCOMES

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

- CT4 - Written/spoken communication: ability to communicate and gather information, ideas, opinions and viewpoints to understand and be able to act, spoken through words or gestures or written through words and/or graphic elements.

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

- CE16 - Ability to apply innovative strategies to projects and industrial activity by applying knowledge of the latest technology, new business models and knowledge management.

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

After passing the subject area students will be able to:

- Analyse written texts and reports in the field of data science.
- Present and argue topics verbally in English in the field of data science.
- Write texts and reports in English in the field of data science.

Once students complete this optional subject, they will have greater initiative coupled with a sense of responsibility and collective awareness through participation in and/or organisation of activities that benefit the university community or society as a whole.

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

Skills	Learning outcomes
CT4	Analyse written texts and reports in the field of data science.
CT4, CE16	Present and argue topics verbally in English in the field of data science.
CT4, CE16	Write texts and reports in English in the field of data science.

4. CONTENTS

1. Unit 1: The Scientific Method
2. Unit 2: Control Systems
3. Unit 3: Design processes
4. Unit 4: Internet Security

Note: The course content and structure may be modified depending on student progress. Students will be informed of any changes in advance.

5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Master lectures
- Case studies
- Collaborative learning
- Problem-based learning
- Project-based learning
- Gamification
- Field work (visits, work experience)

6. LEARNING ACTIVITIES

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

On campus:

Learning activity	Number of hours
Master lectures	43
Problem solving and case studies	54
Case studies and field studies	42
Debates and discussions	7
Learning contract (definition of interests, needs and objectives)	4
Autonomous learning	24
Tutorials	14
Knowledge tests	4
TOTAL	120 hours

7. ASSESSMENT

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

On campus:

Assessment system	Weighting
Essays and reports: Guided writing assignment x 2	20%
Spoken presentation x1	20%
Practical exercises: Digital Block	10%
Debates: Active participation in class	10%
Knowledge tests: Written test x1 (25%) Spoken test x1 (15%)	40%
TOTAL	**100%**

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

8. BIBLIOGRAPHY

The reference publication to accompany this subject area is:

- Evans, V., Dooley, J., Nawathe, V. (2019). Computer Engineering (2nd Ed.). Express Publishing. ISBN: 9781471562501

The recommended bibliography is indicated below:

- Armer, T., & Cambridge University Press. (2017). *Cambridge English for scientists*. Cambridge University Press.
- Ibbotson, M. (2008). *Cambridge English for engineering*. Cambridge University Press.
- Glendinning, E. H., & Macewan, J. (2006). *Oxford English for information technology Student's guide*. Oxford [U.A.] Oxford University Press.
- Michael Swan. A Practical English Usage. Oxford University Press.
- Michael McCarthy and Felicity O'Dell. English Phrasal Verbs in Use – Intermediate to Upper Intermediate. Cambridge University Press.
- Michael McCarthy and Felicity O'Dell. English Idioms in Use. Cambridge University Press.
- Mark Hancock. English Pronunciation in Use. Cambridge University Press.