Course guide
295915 - CAPE - Academic and Professional Communication for Engineering

Last modified: 02/10/2025

Unit in charge: Barcelona East School of Engineering
Teaching unit: 756 - THATC - Department of History and Theory of Architecture and Communication Techniques.

Degree: BACHELOR'S DEGREE IN BIOMEDICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN ENERGY ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Optional subject).

Academic year: 2025 **ECTS Credits:** 6.0 **Languages:** English

LECTURER

Coordinating lecturer: JÚLIA CALVET TERRÉ

Others: Primer quadrimestre:
JÚLIA CALVET TERRÉ - Grup: M1

PRIOR SKILLS

A proficiency level around the B.2. (upper intermediate) is recommended.

TEACHING METHODOLOGY

Lectures combine the lecturer's expository explanation with an active participation of all students in class, by menas of pairwork, groupwork (maximum 4 members) and class discussion and debates. STudent participation is key since there are videos, listening, and activities (like writing and speaking) to do exclusively in class.

LEARNING OBJECTIVES OF THE SUBJECT

The goals of the course focus on the necessary professional communication that engineering students need nowadays.
The main objective of this course is familiarise students with the communicative skills necessary for technical professionals, providing knowledge, understanding and aptitude to the use of English both in writing and orally.
The course aims to help students present, both in writing and orally, topics and/or projects about engineering in an efficient and appropriate way. technical communications is envisaged in a holistic way, so that apart from practising and improving how to communicate to both expert and non-expert audiences on an international level, the course also tackles ethical and intercultural aspects involved in an increasingly international and global labour market.

STUDY LOAD

Type	Hours	Percentage
Self study	90,0	60.00
Hours large group	60,0	40.00

Total learning time: 150 h

CONTENTS

1.WHAT IS TECHNICAL COMMUNICATION AND WHY IS IT IMPORTANT

Description:
The role of communication among other social skills in engineering. The cost of poor communication for an engineer

Full-or-part-time: 15h
Theory classes: 15h

2.FEATURING THE TECHNICAL AND ACADEMIC REGISTER.

Description:
Characteristics: style, tone & register
Developing paragraphs and structuring texts
Coherence
Technical writing tasks

Related activities:
Rewriting the same text addressed to different audiences.
Writing good and coherent paragraphs

Full-or-part-time: 15h
Theory classes: 7h 30m
Self study : 7h 30m

3. TECHNICAL COMMUNICATION FOR ENGINEERS

Description:
3.1 COMMUNICATION FOR THE JOB SEARCH
Job Ads, Cover letters and LinkedIn profile. CVs. Interviews (including video Interview)

3.2 LAUNCHING AND COMMUNICATING A PRODUCT:
Product description
Process description
Report writing

3.3 COMMUNICATING TO SELL:
Persuasive and informative oral presentations (signposting expressions, phrases used in oral presentations, attention grabbers, phrases to express claims, counter-claims and conclusions). Presenting your product or project to the management board. Elevator pitch.

3.4 DISCUSSING AND NEGOTIATING
Meetings.
Intercultural communication in international settings: Avoiding misunderstandings and dealing with cultural differences.

Full-or-part-time: 70h
Theory classes: 35h
Practical classes: 35h

GRADING SYSTEM

Given that this is a communication course, use of ChatGPT and other AI tools that is not part of an activity created by the teacher and use of ChatGPT that is not referenced and cited as a source will be automatically considered plagiarism and cheating and be given a 0 mark.

30% - Midterm exam
30% - Final exam
10% - Class participation (Homework + Attendance + Classwork)
15% - Written report (in class)
15% - Oral presentation (end of semester)

EXAMINATION RULES.

Handwritten.

BIBLIOGRAPHY

Basic:
- Bombardó Solés, Carmen; Aguilar, Marta; Barahona Fuentes, Clàudia. Technical writing : a guide for effective communication [on line]. Barcelona: Edicions UPC, 2007 [Consultation: 14/07/2025]. Available on: https://upcommons.upc.edu/entities/publication/bfa5c4db-15c4-4ac0-9e01-ff5bd4a5983b. ISBN 9788483019276.
- Riordan, Daniel G. Technical report writing today. 9th ed. Boston [etc.]: Houghton Mifflin, cop. 2005. ISBN 0618433899.
- Lannon, John M. Technical communication. 8th ed. New York: Longman, cop. 2000. ISBN 0321023951.
- Last, Suzan. Technical writing essentials [on line]. Victoria, British Columbia: University of Victoria, 2019 [Consultation: 14/07/2025]. Available on: https://pressbooks.bccampus.ca/technicalwriting/. ISBN 9781550586657.

RESOURCES

Computer material:
- Uploaded to Atenea. Resource