

Course guide

270190 - ASDP - Academic Skills for Developing a Project

Last modified: 11/07/2025

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

Degree: BACHELOR'S DEGREE IN INFORMATICS ENGINEERING (Syllabus 2010). (Optional subject).

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

LECTURER

Coordinating lecturer: ANTONIA SOLER CERVERA

Others:

PRIOR SKILLS

In order to carry out academic / professional communication activities in English, students are recommended to have acquired B1 level of the Common European Framework of Reference for Languages (CEF) or higher.

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Generical:

G3. THIRD LANGUAGE: to know the English language in a correct oral and written level, and accordingly to the needs of the graduates in Informatics Engineering. Capacity to work in a multidisciplinary group and in a multi-language environment and to communicate, orally and in a written way, knowledge, procedures, results and ideas related to the technical informatics engineer profession.

TEACHING METHODOLOGY

Class session combine content presentation by teacher, extensive practice and students' participation. Students' participation and involvement are critical for the development of course activities.

The work on the course contents is based on the development of projects and tasks.

The activities are based on problem-solving tasks with practical exercises and analysis of samples.

LEARNING OBJECTIVES OF THE SUBJECT

- 1.To understand and apply the principles of academic communication in engineering
- 2.To understand the importance of intercultural communication in the development of a collaborative project
- 3.To recognize academic oral and written genres in English
- 4.To analyze a communicative situation for an engineering project and to develop a plan sheet to communicate effectively
- 5.To understand and interpret information in English from written sources applying active-reading techniques, and to use information effectively
- 6.To understand and interpret information in English from oral sources applying active-listening strategies, and to use information effectively
- 7.To prepare an outline for a writing assignment and present the main ideas orally
- 8.To write the draft of a document section and revise a document
- 9.To report on the status of a project in writing (planning a project report)
- 10.To participate in academic discussion effectively using the correct kind of language and level of formality
- 11.To prepare and give a short oral presentation on a technical topic



STUDY LOAD

Type	Hours	Percentage
Self study	84,0	56.00
Guided activities	6,0	4.00
Hours medium group	30,0	20.00
Hours large group	30,0	20.00

Total learning time: 150 h

CONTENTS

Principles of technical communication

Description:

Problem-solving and genre. Online communication in English. Intercultural communication in international settings.

Project planning and organization

Description:

Defining a communicative task. A plan sheet for an engineering project. Audience and purpose. Communication strategy.

Gathering and exchanging information in academic settings

Description:

Gathering information from oral and written sources. Active reading. Listening comprehension, and note-taking. Organizing ideas and preparing an outline for a project / project proposal. Presenting main ideas orally.

Basic writing techniques for academic work

Description:

From the outline to the draft. Revising a document (content, register, appropriateness). Elements of language and style in academic writing in English. The progress report.

Oral presentations in academic settings

Description:

The process of designing an oral presentation: planning, delivery and evaluation. Strategies and techniques for effective presentation. Elements of language: pronunciation, signposting and discussion. Body language and gesture.

ACTIVITIES

Understanding the principles of technical communication

Description:

Becoming familiar with problem-solving approaches for communicative purposes and genre. Analyzing different examples of academic genres and the general communicative strategy used.

Specific objectives:

1

Related competencies :

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Full-or-part-time: 12h

Self study: 6h

Theory classes: 3h

Practical classes: 3h

Analyzing some fundamental aspects of technical and academic communication in international contexts

Description:

Analyzing strengths and weaknesses of online communication. Adapting to level of formality in English. Using online tools for collaboration. Reflecting on the importance of intercultural communication

Specific objectives:

1, 2

Related competencies :

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Full-or-part-time: 12h

Self study: 6h

Theory classes: 3h

Practical classes: 3h

Planning and organizing a project in engineering Analyzing a communicative situation. Developing a plan sheet to organize a collaborative project. Devising an effective communicative strategy

Description:

Analyzing a communicative situation. Developing a plan sheet to organize a collaborative project. Devising an effective communicative strategy.

Specific objectives:

3, 4

Related competencies :

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Full-or-part-time: 12h

Self study: 6h

Theory classes: 3h

Practical classes: 3h

Gathering information from written sources and writing an outline for a communicative situation

Description:

Analyzing academic documents (a degree thesis, a proposal, a progress report). Applying active-reading techniques. Selecting relevant information. Organizing ideas and writing an outline. Using references and avoiding plagiarism.

Specific objectives:

3, 5, 7

Related competencies :

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Full-or-part-time: 19h

Self study: 11h

Theory classes: 4h

Practical classes: 4h

Gathering information from oral sources according to a specific purpose and presenting the main ideas of an academic task orally.

Description:

Applying active-listening techniques. Taking notes. Practice in presenting the main ideas of academic work orally.

Specific objectives:

6, 10

Related competencies :

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Full-or-part-time: 19h

Self study: 11h

Theory classes: 4h

Practical classes: 4h

Applying writing techniques to write an academic document

Description:

Drafting a document section. Revising a document: content, register, appropriateness. Revising language and style in academic writing to achieve fluency and accuracy.

Specific objectives:

4, 8, 9

Related competencies :

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Full-or-part-time: 20h

Self study: 12h

Theory classes: 4h

Practical classes: 4h

Designing technical presentation in academic settings

Description:

Applying a three-stage procedure: planning, delivery and evaluation. Devising strategy at the planning stage. Selecting information and structuring the presentation.

Specific objectives:

4, 11

Related competencies :

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Full-or-part-time: 19h

Self study: 8h

Guided activities: 4h

Theory classes: 3h

Practical classes: 4h

Delivering an oral presentation and evaluating it

Description:

Preparing the speech. Designing visuals. Choosing the correct kind of language. Considering pronunciation and elements of language for signposting and discussion. Using body language and gesture. Applying evaluation criteria for oral presentations. Self-evaluation and peer evaluation.

Specific objectives:

10, 11

Related competencies :

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Full-or-part-time: 17h

Self study: 10h

Guided activities: 2h

Theory classes: 2h

Practical classes: 3h

Mid-term test

Description:

A test on the recognizing the basic elements of technical communication and devising a communications strategy.

Specific objectives:

1, 2, 3, 4, 5, 7

Related competencies :

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Full-or-part-time: 8h

Self study: 6h

Guided activities: 2h

Delivering and evaluating the oral presentation

Description:

The students deliver their oral presentations in class and evaluate their partners.

Specific objectives:

11

Related competencies :

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Full-or-part-time: 2h

Guided activities: 2h

End-term test

Description:

Exam on the process of writing and academic genres

Specific objectives:

1, 3, 4, 5, 8

Related competencies :

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Full-or-part-time: 10h

Self study: 8h

Guided activities: 2h

GRADING SYSTEM

Course assessment is based on continuous assessment tasks (course assignments and class participation) and written tests with the following percentages:

- Course assignments. Practical assignments based on the different contents of the course: 15%. These assignments will be done either in class or as homework.
- Course project Written document and oral presentation: 25%.
- Mid-term test: 25%
- Class participation. Students are expected to complete activities and tasks and bring their answers to class for discussion. They are also expected to work in collaboration with others. 10%
- End-term test: 25%

-Students need to complete all the continuous assessment tasks in order to cover all the contents of the course and successfully perform in the exams.

-The average mark resulting from the exams must be a minimum of 3.5 in order to pass the subject. If the exam average is under 3.5, continuous assessment tasks will not be taken into account and the final grade will be the weighted average of the exam marks.

-Students will not get a participation mark if they do not attend a minimum of 50% of the course sessions.

BIBLIOGRAPHY

Basic:

- Secció d'Anglès (UPC). Course workbook: academic skills for developing a project. Cpet, 2012.

Complementary:

- Lannon, J.M.; Gurak, L.J. Technical communication. 15th ed. Harlow: Pearson Education Limited, 2021. ISBN 9781292363646.
- Bombardó, C.; Aguilar, M.; Barahona, C. Technical writing: a guide for effective communication. Edicions UPC, 2007. ISBN 9788483019276.
- Zeegers, P.; Deller-Evans, K.; Egege, S.; Klinger, C. Essential skills for science and technology. Rev. ed. Oxford University Press, 2012. ISBN 9780195576078.

RESOURCES

Hyperlink:

- <http://www.quantumleap.cat>