Course guides
220131 - 220131 - Written Academic Skills for Engineering

Last modified: 21/07/2020

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 756 - THATC - Department of History and Theory of Architecture and Communication Techniques.

Degree: BACHELOR'S DEGREE IN AEROSPACE VEHICLE ENGINEERING (Syllabus 2010). (Optional subject).
BACHELOR'S DEGREE IN AEROSPACE TECHNOLOGY ENGINEERING (Syllabus 2010). (Optional subject).
BACHELOR'S DEGREE IN INDUSTRIAL TECHNOLOGY ENGINEERING (Syllabus 2010). (Optional subject).
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN AUDIOVISUAL SYSTEMS ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN TEXTILE TECHNOLOGY AND DESIGN ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2010). (Optional subject).

Academic year: 2020 **ECTS Credits:** 3.0 **Languages:** English

LECTURER

Coordinating lecturer: Elisabet Arnó Macià

Others: Carmen Mateo de Molina

PRIOR SKILLS

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

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Transversal:
04 COE N3. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
03 TLG. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

TEACHING METHODOLOGY

The course is divided into parts:
Classes
Self-study for doing exercises and activities.
In the classes, lecturers will introduce the theoretical basis of the concepts, methods and results and illustrate them with examples appropriate to facilitate their understanding.
Later, lecturers will guide students in applying theoretical concepts to solve problems, always using critical reasoning. We propose that students solve exercises in and outside the classroom, to promote contact and use the basic tools needed to solve problems.
Students, independently, need to work on the materials provided by teachers and the outcomes of the sessions of exercises/problems, in order to fix and assimilate the concepts.
The lecturers provide the syllabus and monitoring of activities (ATENEA).

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

Type	Hours	Percentage
Self study	45,0	60.00
Hours large group	30,0	40.00

Total learning time: 75 h

CONTENTS

Written academic skills for engineering

Description:
Module 1: The writing process (I) Pre-writing stage
Planning a text: overview of the communicative situation, the plan sheet
Analyzing audience & purpose
Considering style and tone

Module 2: The writing process (II) Writing stage
Drafting: common rhetorical functions in technical writing (description, definition, classification, instructions).
Paragraphs: Structuring and developing paragraphs, intra paragraph coherence
The essay: Structuring the essay (parts of an essay, thesis statements).
Developing essay patterns
Providing inter paragraph coherence
Incorporating visual aids

Module 3: The writing process (III)Post- writing stage
Revising content and organization
Checking for grammatical accuracy
Editing for style
Proofreading

Module 4: Academic and professional documents in English
Application letters and CVs
Technical Reports

Full-or-part-time: 75h
Theory classes: 30h
Self study : 45h

GRADING SYSTEM

Course assessment is based on course assignments, class participation and a final test.
Course assignments: 25%
Written project: 35%
Final test: 30%
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%
All the assignments and tasks are compulsory

BIBLIOGRAPHY

Basic:
- Bombardó, C.; Aguilar, M.; Barahona, C. Technical writing: a guide for effective communication [on line]. Barcelona: Edicions UPC, 2007 [Consultation: 07/07/2017]. Available on: http://hdl.handle.net/2099.3/36667. ISBN 9788483019276.

Complementary:
- Lannon, John M. Technical communication. 11th ed. New York: Longman, 2008. ISBN 9780205559572.
- Bailey, Stephen. Academic writing: a handbook for international students. 2nd ed. London: Routledge, 2006. ISBN 9780415384193.
- Huckin, Thomas N.; Olsen, Leslie A. Technical writing and professional communication for nonnative speakers of english. 2nd ed. New York: McGraw-Hill, 1991. ISBN 0071126422.