

GRAU EN ENGINYERIA MECÀNICA

101234 - ANGLÈS

Informació general

- Tipus d'assignatura : Obligatòria
- Coordinador : Julián Horrillo Tello
- Curs: Segon
- Trimestre: Tercer
- Crèdits: 6
- Professorat:
 - Juan García Ramírez <jgr@tecnocampus.cat>

Idiomes d'impartició

- Anglès

This subject is entirely delivered in English

Competències que es treballen

Bàsiques i Generals

- Capacitat de treballar en un entorn multilingüe i multidisciplinari

Transversal

- T1_Que els estudiants coneixin un tercer idioma, que serà preferentment anglès, amb un nivell adequat de forma oral i per escrit i d'acord amb les necessitats que tindran les graduades i els graduats a cada titulació

Descripció

Since most of the specialised technical literature students will come across is in English, this course aims at familiarising them with the typical structures, lexicon and style of Technical English. Students will learn to interpret and translate technical texts related to their subject matters and to produce basic technical writings. They will also acquire basic writing skills in order to produce formal and informal letters, application letters, electronic mails, and specialised reports.

A strong focus will also be given on listening and speaking skills so that they may overcome everyday situations facilitating their integration in an English-speaking environment.

This module contains methodological and digital online resources in case online delivery is necessary due to Covid-19. That way the achievement of the required knowledge and competencies gathered in this course content will be guaranteed.

Resultats d'aprenentatge

In general terms, the subject contributes to the learning outcomes (LO) specific of the subject matter it belongs to (English): At end of the course, students must be able to:

- (LO1) Identify, interpret, and produce technical writings according to the features of technical register
- (LO2) Translate into Catalan or Spanish authentic technical literature selected from bibliography sources related to the subject-matter
- (LO3) Understand written technical reports and answer comprehension questions about them. Learn the technical vocabulary typical of the subject-matter
- (LO4) Produce writings and technical reports using formal academic register (formal letters to make an order, a claim, ask for information, give information, etc., electronic mails, summaries, descriptions of technical materials and processes and project reports)
- (LO5) Communicate efficiently in English in some professional situations
- (LO6) Make an effective oral presentation on a topic related to the subject-matter
- (LO7) Understand the importance of English as a "lingua franca" commonly used in science, technology, university and professional fields

Metodologia de treball

Teaching Methodology

The classroom work will be based on a theoretical explanation of the syllabus items. These explanations will find practical support with the proposed exercises to be done both in the classroom and outside the classroom. These exercises will be done individually or in small groups.

Pieces of work, exercises, activities, assignments, etc., which form a part of the evaluation will have to be delivered just after completing each one of the contents and never after having been returned to students once corrected by the lecturer.

The exercises and tasks leading to achieve oral skills will be done in the classroom in groups of two to four students.

Other tasks of autonomous learning will be made such as reading proposed articles and texts, deliverables, and exam preparation.

Due to COVID-19, some of the group sessions might be changed into a hybrid format: contact lessons and online lessons (via streaming). That way students may alternatively attend contact lessons, thus respecting the maximum amount of students per classroom established by social distancing measures. Those students who could not attend contact lessons would be able to follow them online from home.

Continguts

Content 1: Grammatical, syntactic and lexical aspects of technical register in the field of electronics, mechanical engineering and industrial organization

1. 's phrases and expressions and the possessive case
2. Relative clauses and their shortening in certain situations
3. Present and past participles (-ing and -ed forms)
4. Complex nominal phrases and noun compounds. Hyphenated phrases
5. Specific vocabulary in electronics, mechanical engineering and/or industrial organization

Related Activities:

- Exercises on 's and the possessive case
- Exercises on shortening of relative clauses and its eventual conversion into participle clauses and/or complex noun phrases
- Analysis of functions and uses of -ing and -ed participles and their interpretation in the context they are used
- Exercises on noun compounds or complex noun phrases and on hyphenated phrases in complex noun phrases
- Glossary of technical terms

Content 2: Technical register and technical translation. Reading comprehension of technical texts in the field of electronics, mechanical engineering and industrial organization

1. Turning non-technical register into a more technical register using selected texts by the points studied in Content 1
2. Production of technical writings according to the features of technical register
3. Making direct technical translations into Catalan or Spanish
4. Reading comprehension of technical literature in the field of electronics, mechanical engineering and/or industrial organization. Critical reading of technical articles

Related Activities:

- Exercises to turn non-technical style texts into technical style
- Direct translations into Catalan or Spanish
- Reading technical articles and texts from the field of electronics, mechanical engineering and/or industrial organization and reading comprehension exercises about them. Critical analysis of the technical articles.

Content 3: Writing skills

1. Production of writings and reports according to formal academic register
2. Writing formal letters to make an order, a claim, to ask for information

3. Writing formal electronic mails
4. Writing a summary
5. Writing a report on a given topic or project related to the subject-matter

Related Activities:

- Exercises to compare informal and formal registers
- Formal letters to make an order, a claim, ask for information
- Writing formal emails
- Writing a summary of an article or a technical report and express a personal opinion
- Writing a report on a topic related to the subject-matter

Content 4: **Oral skills**

1. Conversations to develop oral skills within professional everyday situations: contrast information, make orders, participate in discussions on specific topics, describe technical materials and technical processes
2. Oral presentation (about 10 minutes) on a technical topic related to the subject-matter
3. Fostering group discussions and debates around the topic of the oral presentation

Related Activities:

- Exercises on listening and conversation on topics and professional everyday situations for electronics, mechanical and industrial organization engineers. They will be performed in small groups
- Oral presentation (about 10 minutes) on a technical topic related to the subject-matter fostering debate and group discussion

Activitats d'aprenentatge

Aiming to gather evidence of the achievement of learning outcomes (LO), the following activities will be carried out:

Activity 1: Analysis of grammatical, syntactical and lexical features of technical register in the field of electronics, mechanical engineering and/or industrial organization (Content 1) (Evidence of Learning Outcomes LO1 and LO7). Individual activity.

Making different exercises on 's structures, participles in –ing and –ed, shortening of relative clauses, and complex noun phrases.

- Exercises on 's and the possessive case
- Exercises on the reduction of relative clauses
- Analysis of participles in –ing and –ed in technical texts
- Exercises on complex nominal phrases and hyphenated phrases

Regarding Competencies, this activity has an impact on general competency BG10 and on crosscurricular competency CT1

This is 20% of the final mark

Specific goals:

At the end of the activity, students must be able to:

- Identify and differentiate the use of 's structures with a particular focus on the Genitive Case
- Know the different ways of reduction of relative clauses and to reduce them accordingly
- Know the function and correct translation of participles in –ing and –ed
- Interpret and produce correct complex nominal phrases

Activity 2: Technical Register and technical translation. Reading comprehension of technical literature in the field of electronics, mechanical engineering and/or industrial organization (Content 2) (Evidence of Learning Outcomes LO2, LO3 and LO7). Individual activity.

Turning non-technical register into technical register. Direct translation into Catalan or Spanish of technical passages previously selected from authentic technical literature (specialized magazines, books, technical magazines, Internet, ...) Reading comprehension of technical passages and articles selected from bibliography sources in the field of electronics, mechanical engineering and/or industrial organization. Critical reading of technical articles

- Exercises on conversion from non-technical to technical register of selected passages
- Direct translation into Catalan or Spanish of selected passages
- Exercises on reading comprehension and critical reading of technical texts providing personal opinions
- Exercises on technical vocabulary

Regarding Competencies, this activity has an impact on general competency BG10 and on crosscurricular competency CT1

This activity will be assessed in the final exam (30%).

Specific goals:

At the end of the activity, students must be able to:

- Produce simple technical passages according to the features of technical register
- Translate technical literature into Catalan or Spanish according to basic literary criteria
- Answer comprehension questions of selected technical passages or articles
- Acquire the technical vocabulary typical of the subject-matter

Activity 3: Writing skills (content 3) (Evidence of Learning Outcomes LO4 and LO7). Individual activity

The student will practice writing texts and reports according to an academic style and will have to know the essential features to produce a summary or an abstract.

Having the professional environment into account, the student will have to write formal letters to make orders, claims, information requests, and also will have to produce formal electronic mails.

- Writing a summary of a subject-matter-related article
- Writing a formal letter
- Writing an academic report

Regarding Competencies, this activity has an impact on general competency BG10 and on crosscurricular competency CT1

This is 20% of the final mark

Specific goals:

At the end of the activity, students must be able to:

- Differentiate formal from informal register
- Choose the adequate type of formality in writings depending on the situation
- Write a formal letter and other formal writings (description of technical materials and technical processes)
- Summarize a technical article
- Produce an academic-style report on a project or piece of work

Activity 4: Oral skills (content 4) Evidence of Learning Outcomes LO5, LO6 and LO7). Individual and Group Activity

Students will practice certain situations in the daily professional life of an engineer, such as testing information, making orders, participating in discussions on specific topics.

They will work on the most important aspects of a good oral presentation on a topic related to their subject-matter.

They will have to foster group discussion on the topics presented.

- Exercises on listening comprehension
- 10-minute oral presentation of a technical topic chosen by the student, fostering debate and group discussion
- Oral exercises in the classroom. Class attendance and participation.

Regarding Competencies, this activity has an impact on general competency BG10 and on crosscurricular competency CT1

This is 30% of the final mark. This activity has to be passed in order to comply with the learning outcomes

Specific goals:

At the end of the activity, students must be able to:

- Communicate efficiently with reasonable accuracy and fluency in certain real professional situations
- Make an effective oral presentation on a technical topic
- Give opinions and express points of view on a specific technical or non-technical topic

Activity 5: Exam (Contents 1, 2 and 3) (Evidence of Learning Outcomes LO1, LO2, LO3, LO4 and LO7) Individual activity

This is a written paper with exercises on the points studied in contents 1, 2 and 3 of the module with strong emphasis on technical style, technical translation and reading comprehension.

Regarding Competencies, this activity has an impact on crosscurricular competency CT1

30% of the final mark. A minimum mark of 4 (out of 10) is required in this activity

Specific goals:

At the end of the activity, students must be able to:

- Demonstrate that they have acquired all the contents delivered and practice both in and out of the classroom

In case of partial or total lockdown, the learning activities will remain the same.

Sistema d'avaluació

Assessment Methodology

Classroom exercises and homework exercises will be collected on all the items of the course and a written test will be done according to the following assessment criteria:

1. 20% of the final mark: exercises on 's structures, relative clauses and shortening of relative clauses, participles in –ing and –ed, complex nominal phrases and specific vocabulary
2. 20% of the final mark: exercises on writing skills: formal letters, emails, reports, summaries, ...
3. 30% of the final mark: exercises on oral skills: listening comprehension, oral presentation and participation in discussions and debates, class attendance and participation. **It is mandatory to pass this activity**
4. 30% of the final mark: written exam in which there will be exercises and tasks to demonstrate the acquisition of knowledge related to contents 1, 2 and 3 of the syllabus. **A minimum grade of 4 (out of 10) will be required for the final exam to be considered for the average final mark.**

Students who FAIL or DO NOT deliver the Written Report assignment WILL NOT pass the subject.

If necessary, there will be a **RESIT EXAM** of points 1, 2, 3 and 5 of the assessment (see above): 70% of the final mark. The remaining 30% corresponds to activity 4 above (Oral Skills). **A minimum grade of 4 (out of 10) will be required in the resit exam to pass the subject.**

Rules for Doing the Activities

If one of the activities, tests or exercises is not delivered in due time by the student, it will be considered as not assessed.

The student will not be allowed to use notes, dossier, or dictionaries in the exam(s)

No piece of work, exercise, or assignment which is proved to have been copied from a classmate will be accepted, upon the risk that the author will directly fail the module.

VERY IMPORTANT:

Total or partial PLAGIARISM of any of the assignments will be automatically qualified as FAIL (0). And, if plagiarism is repeated, the module will be given a fail (0).

PLAGIARISM consists of copying text from unacknowledged sources, whether this is part of a sentence or a whole text, which is intended as the student's own text. It includes cutting and pasting from Internet sources, presented unmodified in the student's own text. PLAGIARISM IS A SERIOUS OFFENCE. Students must respect authors' intellectual property, always identifying the sources they may use. They must also be responsible for the originality and authenticity of their own texts.

Recursos

Bàsics

Bibliografies

- Handouts, J. García. 2021

Complementaris

Bibliografies

- Beer, David and McMurrey, David. A Guide to Writing as an Engineer (4th ed.), Hoboken, NJ: John Wiley & Sons, 2014.
- Bonamy, David. Technical English 3. Coursebook and Workbook, Harlow, UK: Pearson Education, 2011.
- Bonamy, David. Technical English 4. Coursebook and Workbook, Harlow, UK: Pearson Education, 1995.
- Diccionario McGraw-Hill de Ingeniería Eléctrica y Electrónica
- Electrical and Computer Engineering Dictionary (English/Spanish-Spanish/English). Steven M. Kaplan, 2000. Wiley Intescience Ed.
- English for Science and Technology, Trimble, L. Cambridge 1985
- Essential Grammar in Use. Murphy, R. Cambridge 2003
- Polytechnic Dictionary of Spanish and English Languages. F. Beigbeder Atienza. Diaz de Santos, S.A.
- Technical Writing and Professional Communication for Nonnative Speakers of English, Huckin and Olsen. McGraw-Hill, 1991
-

Test Your Professional English: Business : General. Flinders, Steve, and Steve Flinders. Harlow, Essex, Eng: Pearson Education, 2002. Print.

- The Essence of Technical Communication. Herbert L. Hirsch. IEEE Press. 2000

Enllaços web

- <https://www.eenewsautomotive.com/>
- www.bbc.co.uk/worldservice/learningenglish
- www.edn.com
- www.edn.com
- www.esl-lab.com