Course guide
240EN22 - 240EN22 - Entrepreneurship Skills

Last modified: 13/03/2025

Unit in charge: Barcelona School of Industrial Engineering
Teaching unit: 732 - OE - Department of Management.
756 - THATC - Department of History and Theory of Architecture and Communication Techniques.

Degree: MASTER'S DEGREE IN ENERGY ENGINEERING (Syllabus 2013). (Optional subject).
MASTER'S DEGREE IN ENERGY ENGINEERING (Syllabus 2022). (Optional subject).

Academic year: 2025 **ECTS Credits:** 5.0 **Languages:** English

LECTURER

Coordinating lecturer: Marta Aguilar i Pérez
Jordi Olivella Nadal

Others: Marta Aguilar i Pérez (Communication)
Jordi Olivella Nadal (Entrepreneurship)

PRIOR SKILLS

Possess at least the B.2.2 (First Certificate) proficiency level or equivalent.

TEACHING METHODOLOGY

Class activities will consist of short-range written exercises, individual assignments (presentation of assignments; registration assignment, feasibility report; technical descriptions and marketing report by the Communication part and in obtaining information and in the application of technical evaluation of a technology and its market potential (part of Entrepreneurship).

Simultaneously, a technical opportunity will be studied and a report and oral presentation of this opportunity will be prepared. The project will be unique and common in both parts of the subject.

LEARNING OBJECTIVES OF THE SUBJECT

In relation to technological entrepreneurship, this course aims to provide students with an experience-based introduction into the initial phase of starting a technology company. It is a real life simulation of the process that founders go through when analysing a technological business opportunity.

In relation to communication, the objectives are familiarise students with the main features of technical and business English so that they can communicate technical information effectively, both in writing and orally. raise awareness about the importance opf teh communicative context, purpose and audience so that content and format and register are adapted to every communicative situation. Communicating for informative purposes (e.g. writing a progress report or informational presentation) and for persuasive purposes.

At the end of the course, the student will be able to use the tools analysis of analysis that are used in the entrepreneurship world to assess a technological business opportunity and to present the results appropriately.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	30,0	66.67
Hours large group	15,0	33.33

Total learning time: 45 h

CONTENTS

MODULE 1: TECHNOLOGICAL BUSINESS OPPORTUNITIES: TECHNOLOGY ASPECTS

Description:
Methodology of analysis of a technological business opportunity

Full-or-part-time: 10h 30m
Theory classes: 7h 30m
Self study : 3h

MODULE 2: TECHNOLOGICAL BUSINESS OPPORTUNITIES: MARKET ASPECTS

Description:
Methodology of analysis of a technological business opportunity

Full-or-part-time: 10h 30m
Theory classes: 7h 30m
Self study : 3h

MODULE 3: TECHNICAL AND BUSINESS COMMUNICATION

Description:
Featuring techncial and business communication. Aspects of tone and style (register). Impersonalization in technical documents.
Writing memos and technical innovation proposal or progress reports on enterpreneurship projects.
Short oral presentations: informative format (Product and process description)

Related activities:
From a case study on a communication problem, write a better, revised version of one or several documents.
Tasks on the academic and technical register. Rewriting a text from informal to formal and viceversa.

Full-or-part-time: 10h 30m
Theory classes: 7h 30m
Self study : 3h

MODULE 4: PERSUASIVE COMMUNICATION

Description:
- "Elevator pitch": selling an idea of a technological innovative product in a few minutes.

Full-or-part-time: 10h 30m
Theory classes: 7h 30m
Self study : 3h

ACTIVITIES

Project: Development of the analysis of a technological business opportunity

Description:
A technical opportunity will be studied and a report and oral presentation of this opportunity will be prepared. The project will be unique and common in both parts of the subject.

Full-or-part-time: 83h
Self study: 68h
Practical classes: 15h

GRADING SYSTEM

Class activities,
Communication sessions: 25%
Technology opportunities sessions: 25%
Final report and oral presentation,
Communication aspects: 25%
Technology aspects: 25%

BIBLIOGRAPHY

Basic:
- Bombardó, C.; Aguilar, M. ; Barahona, C. Technical writing : a guide for effective communication [on line]. Barcelona: Edicions UPC, 2007 [Consultation: 02/07/2025]. Available on: https://upcommons.upc.edu/handle/2099.3/36667. ISBN 9788483019276.
- Lannon, John M ; Gurak ; Laura J. Technical communication [on line]. 15th ed. Harlow: Pearson education limited, 2021 [Consultation: 27/06/2025]. Available on: https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=6504034. ISBN 9781292363646.
- Osterwalder, Alexander; Pigneur, Yves; Clark, Tim. Business model generation : a handbook for visionaries, game changers, and challengers [on line]. Hoboken, New Jersey: John Wiley & Sons, cop. 2010 [Consultation: 14/07/2025]. Available on: https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=581476. ISBN 9780470876411.
- Olivella Nadal, Jordi. Technology evaluation for entrepreneurs [on line]. Copenhagen: Bookboon.com, 2018 [Consultation: 20/04/2023]. Available on: https://bookboon.com/en/technology-evaluation-for-entrepreneurs-ebook. ISBN 9788740323603.