Course guide
300274 - BUSINSS - Project on Ict-Based Business Models

Last modified: 11/05/2026

Unit in charge: Castelldefels School of Telecommunications and Aerospace Engineering
Teaching unit: 732 - OE - Department of Management.

Degree: MASTER'S DEGREE IN APPLIED TELECOMMUNICATIONS AND ENGINEERING MANAGEMENT (MASTEAM) (Syllabus 2015). (Optional subject).
ERASMUS MUNDUS MASTER IN COMMUNICATIONS ENGINEERING AND DATA SCIENCE (CODAS 1) (Syllabus 2024). (Compulsory subject).
ERASMUS MUNDUS MASTER IN COMMUNICATIONS ENGINEERING AND DATA SCIENCE (CODAS 2) (Syllabus 2024). (Optional subject).
MASTER'S DEGREE IN ARTIFICIAL INTELLIGENCE FOR CONNECTED INDUSTRIES (AI4CI) (Syllabus 2025). (Compulsory subject).

Academic year: 2026 **ECTS Credits:** 3.0 **Languages:** English

LECTURER

Coordinating lecturer: Alcober Segura, Jesus

Others: Alcober Segura, Jesus

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Generical:
04 DIR. (ENG) Dirigir y planificar, a nivel técnico y de gestión, cualquier proyecto de investigación, desarrollo o innovación, basado en las TIC y aplicado a cualquier ámbito de la economía productiva.
05 COO. (ENG) Coordinar las tareas de un equipo multidisciplinar para completar las tareas de un proyecto tecnológico o de innovación basado en las TIC.

Transversal:
01 EIN. ENTREPRENEURSHIP AND INNOVATION: Knowing about and understanding how businesses are run and the sciences that govern their activity. Having the ability to understand labor laws and how planning, industrial and marketing strategies, quality and profits relate to each other.
02 SCS. SUSTAINABILITY AND SOCIAL COMMITMENT. Being aware of and understanding the complexity of social and economic phenomena that characterize the welfare society. Having the ability to relate welfare to globalization and sustainability. Being able to make a balanced use of techniques, technology, the economy and sustainability.
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.

Basic:
CB8. Students will be able to integrate knowledge and face the complexity of formulating judgments based on information that, while being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and opinions.

TEACHING METHODOLOGY

The teaching methodology of this course has 4 parts:
- Lecture: Lecturers present concepts, principles and techniques, with the active participation of students.
- Problem Based Learning: Lecturers and students resolve exercises and standard problems through specific techniques related to the theoretical contents and principles of the course.
- Reading Based learning: Students read and discuss current technical papers related to the theoretical contents and principles of the course.
- Self-study: Students diagnose their learning needs, in collaboration with the lecturers, and plan their own learning process.

LEARNING OBJECTIVES OF THE SUBJECT

This course introduces students to the project and service management used on entrepreneurship, complementing the knowledge and skills developed in the course ICT-Based Entrepreneurship. The students work on a ICT-based entrepreneurship project, focused mainly on two elements of ICT entrepreneurship. On one hand, the course applies the fundamentals of service management of entrepreneurship, based on best practices frameworks. On the other hand, the course analyses similar businesses applying cutting-edge technologies, such as 5G and IoT.

STUDY LOAD

Type	Hours	Percentage
Hours large group	27,0	36.00
Self study	48,0	64.00

Total learning time: 75 h

CONTENTS

Module 1: Service Management used in entrepreneurship

Description:
Most of the companies created by entrepreneurs are service companies. In this module we will apply the best service management practices for this type of company, based on a project that students will work on in groups.

Related activities:
A1..A3: Activities from 1 to 3 (04 DIR, 01 EIN, 03 TLG)
P1: Project 1 (CB8, 04 DIR, 05 COO, 01 EIN, 02 SCS, 03 TLG)

Full-or-part-time: 31h 30m
Theory classes: 13h 30m
Self study : 18h

Module 2: Business models in 5G and IoT

Description:
Some of the cutting-edge technologies are currently 5G and IoT. This module will explain the emerging business models with these technologies that transversely affects many industries and that will serve as a model to follow in the project work carried out by the students.

Related activities:
A4..A6: Activities from 4 to 6 (04 DIR, 01 EIN, 03 TLG)

Full-or-part-time: 43h 30m
Theory classes: 13h 30m
Self study : 30h

GRADING SYSTEM

Any academic fraud, plagiarism or use or possession of unauthorised means in an assessment activity leads to a mark of zero (0) for the affected test or assignment. Furthermore, in accordance with the University's regulations, if disciplinary proceedings are initiated the subject is recorded as "Pending Assessment" until a decision is reached. These incidents are managed in accordance with the **Action Framework for Academic Integrity in Assessment at the UPC**.

BIBLIOGRAPHY

Basic:
- Wheelwright, Steven C; Clark, Kim B. Revolutionizing product development : quantum leaps in speed, efficiency, and quality. New York: The Free Press, cop. 1992. ISBN 0029055156.
- ITIL. ITIL Foundation. 4 Edition. Norwich: TSO, 2019. ISBN 9780113316076.