Challenge-based Innovation Project

Department in charge: Department of Management and Department of Electronic Engineering

Total teaching hours: 15 hours

Language: English

Coordinating lecturer: Ramon Bragós and Vicenç Fernández

Other lecturers (if any):

Teaching methodologies:

The course will be performed by alternating introductory methodology pills and collaborative work in the first sessions, followed by a challenge-based project. The students of different Ph.D. programs will be mixed to build interdisciplinary teams.

Learning objectives:

- Identify society's needs and evaluate and validate their relevance.
- Propose innovative solutions for these needs based on the use of research and technology.
- Define a suitable business model that would allow the implementation of the solutions.
- Evaluate the potential social impact and the sustainability of the proposed solutions.

Course contents:

Need finding and understanding the problems (3h):
- Identification, categorization, and prioritization of needs
- Validation of needs
- Framing the challenge

Ideation, generation of solution concepts (6h):
- Generation and categorization of solution concepts
- Validation of solution concepts. Rapid prototyping
- User Feedback
- Refinement of solution ideas
- Sustainability and ethical analysis of the proposed solutions

Business model (3h):
- Value Proposition
- Business Model

Project presentation and discussion (3h)

Basic bibliography:

76. ISBN 9780470876411.