Course guide
205119 - 205119 - Validating and Communicating Disruptive Ideas

Last modified: 18/05/2026

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 758 - EPC - Department of Project and Construction Engineering.

Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Optional subject).
MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Optional subject).
MASTER'S DEGREE IN SPACE AND AERONAUTICAL ENGINEERING (Syllabus 2016). (Optional subject).
MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2025). (Optional subject).

Academic year: 2026 **ECTS Credits:** 6.0 **Languages:** English

LECTURER

Coordinating lecturer: Macarulla Martí, Marcel

Others: Nicolau Martinez, Marc
Arcal Cunillera, Jordina

TEACHING METHODOLOGY

This is a hands-on course where students will learn and implement validation methodologies and their communication skills to solve a real challenge from the industry. They will work hand by hand with industrial companies, learning how to validate disruptive ideas and communicate them. Students will practice how to pitch their ideas and solutions and how to validate them with real users.

LEARNING OBJECTIVES OF THE SUBJECT

In this course students will learn how to effectively communicate their disruptive ideas to convince the audience and trigger call to actions. They will learn how to do better presentations for their disruptive projects and how to validate the ideas behind them in advance.

STUDY LOAD

Type	Hours	Percentage
Hours small group	24,0	16.00
Self study	96,0	64.00
Hours large group	30,0	20.00

Total learning time: 150 h

CONTENTS

Module 1: Tools to validate disruptive ideas

Description:
In this module students will learn different processes and tools to help validate disruptive ideas and hypothesis with customers (i.e. Jobs to be Done, etc.). In this module students will deep dive into the most suitable techniques to validate their ideas in order to improve their validation skills.

Full-or-part-time: 33h
Theory classes: 12h
Self study : 21h

Module 2: How to create a great pitch

Description:
In this module students will deep dive on how to better communicate their disruptive ideas to trigger a call to action by the audience. They will work on the language, the resources, the content, etc. Everything that influences on a great pitch to convince the audience. This module will focus on improving their abilities to sell ideas into organizations.

Full-or-part-time: 33h
Theory classes: 12h
Self study : 21h

Module 3: Storytelling for influence

Description:
In this module students will learn the framework to design powerful stories and presentations that influence the audience towards change an action.

Full-or-part-time: 22h
Theory classes: 8h
Self study : 14h

Module 4: Solving an industry's challenge

Description:
This module will focus on solving a challenge proposed by a company. Designed solutions will be prototyped and tested in simulated scenarios, focusing on validating potential ideas to be developed by a company giving them the maximum value.

Full-or-part-time: 62h
Theory classes: 22h
Self study : 40h

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**.

The final grade depends on the following assessment criteria:
â☐☐ 20% classroom deliverables
â☐☐ 20% midterm deliverable (solutions + first prototypes)
â☐☐ 40% final deliverable (final solution and prototype)
â☐☐ 20% Presentation and video

RESOURCES

Other resources:
The Jobs to be done playbook, by Jim Kalbach.
When Coffee and kale compete, by Alan Klement
User friendly, by Cliff Kuang & Robert Fabricant
Resonate, by Nancy Duarte
Slide:ology, by Nancy Duarte
Pitch anything, by Oren Klaff
The mum test, by Rob Fitzpatrick
Visual Teams, by David Sibbet
The field study handbook, by Jan Chipchase