

## COURSE GUIDE

Course Data	
Name	Introduction to Entrepreneurship
Code	DOI-OPT-445
Degree	Grado en Ingeniería en Tecnologías Industriales, Grado en Tecnologías de Telecomunicación
Year	4
Semester	2º
ECTS Credits	3 ECTS
Type	Optative
Department	Industrial Engineering
Area	Economics and Business Administration
Coordinator	Pablo Rosa Casado

Information of Professors	
Professor	
Name	Pablo Rosa Casado
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Tutoring hours	appointment by e-mail

## SPECIFIC INFORMATION OF THE COURSE

Course context	
Contribution to the professional profile of the degree	
<p>It is currently a known fact that <b>traditional business development processes are not suitable</b> for just any business scenario. Business environments have undergone radical changes in recent years (whether in corporate or entrepreneurial environments) and have to take the appropriate step to adapt to changes in the market realities in which we work. For this, it is necessary to <b>provide new methodologies appropriate to this development paradigm</b>.</p> <p>It is widely accepted that <b>the most effective way to learn these methodologies is from the experimentation of tools in contexts of uncertainty</b>.</p> <p>As a result, this course has been created as a training activity that allows students to learn how to develop business models with new, more agile methodologies. This is <b>Introduction to Entrepreneurship course</b>.</p> <p>Classes will combine <b>theoretical pills, case studies, tools and techniques</b> for idea generation and business model design, and <b>team work on a project</b>. The team project will indeed be the cornerstone of the course.</p>	
Pre-requirements	
There are no particular prerequisites to take this course.	

## CONTENTS

### Topics

1. Creativity and stimulation techniques
2. Design Thinking
3. Business Model Canvas.
4. Business Model Patterns
5. Business Model Environment
6. Value Proposition Canvas.
7. Kinds of Fits.
8. Introduction to Customer Development.
9. Introduction to the Lean Startup process
10. Experiments catalog

### Project work

The workshops will take up **30%** of the time to cover the **theoretical approach**, tools and cases. The remaining time will be used to work on their own **team project**.

**W1. Creativity & Design Thinking Workshop** is focused on the student to understand how creative processes work and familiarize themselves with the techniques of generating innovative ideas as a prelude to the generation of new business ventures.

**W2. During Business Design Workshop**, it is sought that the student understands how to begin to articulate an idea to turn it into a business using various techniques of Business Design.

**W3. Lean Startup Workshop** is focused on the student becoming familiar with the Lean Startup process, its principles and validation techniques.

### Methodologies

Project work will take us to introduce and apply tools from methodologies such as:

- design thinking

- lean startup

## Competences – Learning Results

### Competences

#### Basic Competences

- CG4. Ability to solve problems with initiative, decision, creativity, and critical reasoning; and to communicate and transfer knowledge, abilities and skills, understanding the ethical and professional responsibility.
- CG9. Management and planning ability in business environments, or in other institutions or organizations.

#### Specific Competences

- CRI9. Basic knowledge on production and manufacturing systems.
- CRI11. Business management applied knowledge.

### Learning Results

At the end of the course the student must have achieved the following outcomes:

- RA1. Creativity techniques. Basadur profiles. How to encourage a creative environment.
- RA2. Understand the process of Design Thinking and how to apply it to solving a real case.
- RA3. Understand the Business Model Canvas tool and its environment and apply it to different real cases.
- RA4. Understand the Value Proposition Canvas tool.
- RA5. Understand the Customer Development process. Identify business model assumptions. Design experiments.

## TEACHING METHODOLOGY

### Classroom Methodology: Activities

1. **Theoretical pills:** the instructor will introduce some background and relevant frameworks to understand the topic.
2. **Real cases:** key concepts will be illustrated using real-life examples and case studies, which can will also become a source of inspiration for students' projects.
3. **Tools & techniques:** the instructor will introduce some key tools and techniques from design thinking and entrepreneurship that can be useful for developing the projects: brainstorming, idea selection, business model design, etc.

4. **Hands-on learning:** we will have some guided dynamics in class to encourage students participation and engagement, and time for team work on the projects applying the tools and techniques explained in class.

**Non-Classroom Methodology: Activities**

5. **Individual research:** students will be encouraged to do research on their own, both to deepen the understanding of the concepts and methods discussed in class and to discover new resources, related concepts and inspiration for their projects.

6. **Team project:** students will have to work on their projects out of classroom. Team project is the cornerstone of this course: it is here where students should demonstrate their understanding of concepts and their ability to propose innovative solutions, in a process of co-creation and co-learning. The instructor will guide this process and be available for addressing the questions of students.

**EVALUATION ACTIVITIES AND CRITERIA**

Evaluation activities	Evaluation Criteria	Weight Percentage
Active participation in class	<ul style="list-style-type: none"> <li>- Quizzes to check understanding of key concepts</li> <li>- Questions and comments in class, and active engagement in the proposed activities</li> <li>- Activities' outcomes</li> </ul>	50%
Teamwork in class	<ul style="list-style-type: none"> <li>- Meeting the assignment</li> <li>- Original and critical analysis</li> <li>- Evolution of ideas</li> </ul>	25%
Team project final defense	<ul style="list-style-type: none"> <li>- Level to which students implement what they have learned in the analysis of a real situation</li> <li>- Quality of innovation of the proposed solution</li> <li>- Level of technical &amp; economic feasibility of the proposed solution</li> <li>- Ability to present and communicate the solution</li> </ul>	25%

**Qualification Criteria**

Grading will be based on:

- [ 50% ] Participation in class
- [ 25% ] Teamwork in class
- [ 25% ] Team project final defense

The following conditions must be accomplished to pass the course:

- A minimum overall grade of at least 5 over 10.
- A minimum grade in the team project of 5 over 10.

## WORK PLAN AND SCHEDULE

SUMMARY OF WORKING HOURS OF THE STUDENT		
CLASSROOM HOURS		
Lectures	Individual work	Team work
10	10	10
NON-CLASSROOM HOURS		
Autonomous work – research	Team work - project	
20	40	
<b>ECTS CRÉDITS:90</b>		

## BIBLIOGRAPHY AND RESOURCES

Basic References
Reference books, articles & videos
The startup owner's manual: the step by step guide for building a great company. Blank & Dorf (2012).
Additional References
Online resources
<ul style="list-style-type: none"> <li>• Business Model Generation: A Handbook for Visionaries, Game Changers and Challengers., Alexander Osterwalder (2010).</li> <li>• <a href="#">Art Of The Start 2.0., Guy Kawasaki</a></li> </ul>

- Los Principales Errores De Los Emprendedores (Innovación Y Creatividad), Carlos Blanco Vázquez (2013).
- The Four Steps to the Epiphany, Steve Blank (2006).
- Design Thinking Toolkit by IDEO.
- Running Lean: Iterate from Plan A to a Plan That works. Ash Magura (2012).
- Value Proposition Design: How to Create Products and Services Customers Want, Alexander Osterwalder & Yves Pigneur (2012)
- The Lean Startup: How Constant Innovation Creates Radically Successful Businesses, Eric Ries (2011).
- Lean Analytics: Use Data to Build a Better Startup Faster. Allistair Croll & Benjamin Yoskovitz (2013).
- Lean Customer Development: Building Products Your Customers Will Buy, Cindy Alvarez (2014).
- Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant, W,Chan Kim (2015).
- Seven Habits of Highly Effective People, Stephen Covey (2004)
- Lean UX: Designing Great Products with Agile Teams, Jeff Gothelf & Josh Seiden (2016).
- Finanzas para emprendedores, Antonio Manzanera Escribano.