



POLITÉCNICA

INTERNATIONAL  
CAMPUS OF  
EXCELLENCE

COORDINATION PROCESS OF  
LEARNING ACTIVITIES  
PR/CL/001



E.T.S. de Ingenieros  
Informáticos

# ANX-PR/CL/001-01

## LEARNING GUIDE

### SUBJECT

**103000842 - Introduction To Innovation And Entrepreneurship Management**

### DEGREE PROGRAMME

10AZ - Master Universitario en Innovación Digital

### ACADEMIC YEAR & SEMESTER

2020/21 - Semester 1

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## 1. Description

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### 1.1. Subject details

<b>Name of the subject</b>	103000842 - Introduction To Innovation And Entrepreneurship Management
<b>No of credits</b>	6 ECTS
<b>Type</b>	Compulsory
<b>Academic year of the programme</b>	First year
<b>Semester of tuition</b>	Semester 1
<b>Tuition period</b>	September-January
<b>Tuition languages</b>	English
<b>Degree programme</b>	10AZ - Master Universitario en Innovación Digital
<b>Centre</b>	10 - Escuela Tecnica Superior de Ingenieros Informaticos
<b>Academic year</b>	2020-21

## 2. Faculty

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### 2.1. Faculty members with subject teaching role

<b>Name and surname</b>	<b>Office/Room</b>	<b>Email</b>	<b>Tutoring hours *</b>
Pilar Quevedo Cano (Subject coordinator)		pilar.quevedo@upm.es	- -
Roberto Martinez Gamero	CAIT	roberto.martinez@upm.es	Sin horario. The tutoring schedule is indicative and subject to possible changes. Please check tutoring times with the faculty

			member in charge.
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\* The tutoring schedule is indicative and subject to possible changes. Please check tutoring times with the faculty member in charge.

### 2.3. External faculty

Name and surname	Email	Institution
Gonzalo León	gonzalo.leon@upm.es	CAIT

## 3. Prior knowledge recommended to take the subject

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### 3.1. Recommended (passed) subjects

The subject - recommended (passed), are not defined.

### 3.2. Other recommended learning outcomes

- According to general prerequisites for EIT Digital master program this is the first course for all enrolled students in the Master Degree. Students should have finished their Engineering Degree Project (240 ECTS), accepted in the Master and formally regis

## 4. Skills and learning outcomes \*

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### 4.1. Skills to be learned

CB08 - Que los estudiantes sean capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios

CE-EIT01 - Capacidad para seguir y aplicar los procesos y actividades del emprendimiento para lanzar un empresa de base tecnológica basada en actividades previas de I+D e identificar diferentes fuentes de financiación de emprendimiento e innovación, y seleccionar la más apropiada para el modelo de negocio y la tecnología consideradas.

CE-EIT02 - Capacidad para diseñar las actividades y la estructura de gestión adecuadas para un proyecto de innovación, desde su concepción a la explotación de los resultados, usando un modelo de gestión adaptado al tipo de proyecto.

CG03 - La capacidad de usar la lengua inglesa de manera competente, es decir, con capacitación para tareas complejas de trabajo y estudio.

CG07 - Capacidad de trabajar y comunicarse también en contextos internacionales.

CG08 - La capacidad de traducir innovaciones en soluciones comerciales factibles.

CG09 - La capacidad de transformar las experiencias prácticas en problemas y desafíos de investigación.

## 4.2. Learning outcomes

RA107 - -- In depth understanding of the important elements in managing companies and developing its human resources

RA105 - - In depth understanding of the general process and roles involved in developing an idea and starting up a new technology-based company

RA106 - - - In depth understanding of the basic entrepreneurial finance

\* The Learning Guides should reflect the Skills and Learning Outcomes in the same way as indicated in the Degree Verification Memory. For this reason, they have not been translated into English and appear in Spanish.

## 5. Brief description of the subject and syllabus

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### 5.1. Brief description of the subject

Introduction to innovation and entrepreneurship management: definition, models and processes of innovation. Organizational structures, corporate innovation, protection of technology, digital economy. Innovation projects management, risks of international projects. Market. Financial support for innovation. Evolution of technology.

## 5.2. Syllabus

1. Introduction to Basics course
2. Concepts and types of innovation
3. Innovation context and processes (focused on the ICT sector)
4. The added value of (open) cooperation in innovation activities
5. .- Innovation ecosystems
6. Digital transformation
7. Organizational structures
8. Creativity as a source of innovation
9. .- Introduction to Entrepreneurship
10. Crowdsourcing and Community platforms
11. Funding innovation
12. Strategic direction of innovation
13. Protection and commercialization of knowledge
14. Innovation and entrepreneurship management application to a case study

## 6. Schedule

### 6.1. Subject schedule\*

Week	Face-to-face classroom activities	Face-to-face laboratory activities	Distant / On-line	Assessment activities
1			<b>Introduction to Basics course</b> Duration: 02:00	
2			<b>Concepts and types of innovation</b> Duration: 02:00  <b>Concepts and types of innovation</b> Duration: 01:00  <b>Concepts and types of innovation</b> Duration: 01:00	
3			<b>Innovation context and processes (focused on the ICT sector)</b> Duration: 01:00  <b>Innovation context and processes (focused on the ICT sector)</b> Duration: 01:00  <b>Innovation context and processes (focused on the ICT sector)</b> Duration: 01:00  <b>Innovation context and processes (focused on the ICT sector)</b> Duration: 00:45	<b>Quiz 1</b>  Continuous assessment Presential Duration: 00:15
4			<b>The added value of (open) cooperation in innovation</b> Duration: 02:00  <b>The added value of (open) cooperation in innovation</b> Duration: 01:00  <b>The added value of (open) cooperation in innovation</b> Duration: 01:00	

5			<p><b>Innovation ecosystems</b> Duration: 01:00</p> <p><b>Innovation ecosystems</b> Duration: 01:00</p> <p><b>Innovation ecosystems</b> Duration: 01:00</p> <p><b>Innovation ecosystems</b> Duration: 01:00</p>	
6			<p><b>Digital transformation</b> Duration: 02:00</p> <p><b>Digital transformation</b> Duration: 01:00</p> <p><b>Digital transformation</b> Duration: 00:45</p>	<p><b>Quiz 2</b></p> <p>Continuous assessment Presential Duration: 00:15</p>
7			<p><b>Organizational structures</b> Duration: 01:00</p> <p><b>Organizational structures</b> Duration: 01:00</p> <p><b>Organizational structures</b> Duration: 01:00</p> <p><b>Organizational structures</b> Duration: 01:00</p>	
8			<p><b>Creativity as a source of innovation</b> Duration: 02:00</p> <p><b>Creativity as a source of innovation</b> Duration: 01:00</p> <p><b>Creativity as a source of innovation</b> Duration: 01:00</p>	
9			<p><b>Introduction to Entrepreneurship</b> Duration: 01:00</p> <p><b>Introduction to Entrepreneurship</b> Duration: 01:00</p> <p><b>Introduction to Entrepreneurship</b> Duration: 01:00</p>	



			<p><b>Introduction to Entrepreneurship</b> Duration: 01:00</p>	
10			<p><b>Crowdsourcing and Community platforms</b> Duration: 02:00</p> <p><b>Crowdsourcing and Community platforms</b> Duration: 01:00</p> <p><b>Crowdsourcing and Community platforms</b> Duration: 00:45</p>	<p><b>Quiz 3</b> Continuous assessment Presential Duration: 00:15</p>
11			<p><b>Funding innovation</b> Duration: 01:00</p> <p><b>Funding innovation</b> Duration: 01:00</p> <p><b>Funding innovation</b> Duration: 01:00</p> <p><b>Funding innovation</b> Duration: 01:00</p>	
12			<p><b>Strategic direction of innovation</b> Duration: 02:00</p> <p><b>Strategic direction of innovation</b> Duration: 01:00</p> <p><b>Strategic direction of innovation</b> Duration: 01:00</p>	
13			<p><b>Protection and commercialization of knowledge</b> Duration: 01:00</p> <p><b>Protection and commercialization of knowledge</b> Duration: 01:00</p> <p><b>Protection and commercialization of knowledge</b> Duration: 01:00</p> <p><b>Protection and commercialization of knowledge</b></p>	

			Duration: 01:00	
14				<b>Innovation and entrepreneurship management application to a case study</b>  Continuous assessment Presential Duration: 04:00
15				<b>Final exam</b>  Continuous assessment Presential Duration: 02:00
16				
17				

Depending on the programme study plan, total values will be calculated according to the ECTS credit unit as 26/27 hours of student face-to-face contact and independent study time.

\* The schedule is based on an a priori planning of the subject; it might be modified during the academic year, especially considering the COVID19 evolution.

## 7. Activities and assessment criteria

### 7.1. Assessment activities

#### 7.1.1. Continuous assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
3	Quiz 1		Face-to-face	00:15	5%	5 / 10	CG08 CG09 CB08 CE-EIT01 CG03 CG07 CE-EIT02
6	Quiz 2		Face-to-face	00:15	5%	5 / 10	CG03 CG07 CG08 CG09 CB08 CE-EIT01 CE-EIT02
10	Quiz 3		Face-to-face	00:15	5%	5 / 10	CG08 CG09 CB08 CE-EIT01 CE-EIT02 CG03 CG07
14	Innovation and entrepreneurship management application to a case study		Face-to-face	04:00	60%	5 / 10	CG08 CG09 CB08 CE-EIT01 CE-EIT02 CG03 CG07
15	Final exam		Face-to-face	02:00	25%	5 / 10	CG03 CG07 CG08 CG09 CB08 CE-EIT01 CE-EIT02

#### 7.1.2. Final examination

No se ha definido la evaluación sólo por prueba final.

### 7.1.3. Referred (re-sit) examination

No se ha definido la evaluación extraordinaria.

## 7.2. Assessment criteria

The evaluation of the students will be based on three main sources:

? Continuous evaluation (15%): activities during lectures (classroom interactivity, quizzes, etc.)

? Group work (60%): development and final presentation of the group work

? Final exam (25%)

## 8. Teaching resources

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### 8.1. Teaching resources for the subject

Name	Type	Notes
James M. Utterback (1994). Mastering the dynamics of innovation. Harvard Business School Press.	Bibliography	
. Alexander Osterwalder & Yves Pigneur (2010). Business model generation. John Wiley & Sons. New Jersey 2010.	Bibliography	
Eric Ries (2011): The Lean Startup. Crown Business New York. 2011	Bibliography	
W. Chan Kim and Renée Mauborgne (2015). Blue Ocean Strategy. Harvard Business Review Press. 2015. ISBN: 978-1-62527-449-6	Bibliography	

Henry Chesbrough. Open Innovation: The New Imperative for Creating and Profiting from Technology (HBS Press, 2003).	Bibliography	
Henry Chesbrough (2011). Open Services Innovation. Rethinking your business to grow and compete in a new era. Ed. Jossey-Bass. 2011. ISBN 978-0-470-90574-6	Bibliography	
Geoffrey A. Moore, ?CrossingtheChasm?1991, revised1999 and 2014	Bibliography	
Richard Foster & Sarah Kaplan, ?Creative Destruction: Why Companies that Are Built to Last Underperform the Market?, 2001	Bibliography	
. Henry Chesbrough. Open Innovation: The New Imperative for Creating and Profiting from Technology, 2003	Bibliography	
. Eric von Hippel, Open User Innovation, 2013	Bibliography	
Steve Blank, ?The Four Steps to the Epiphany? 2005, 2nd Ed. 2013	Bibliography	
Steve Blank& Bob Dorf, ?The Startup Owner?s Manual?, 2012	Bibliography	
Madeleine I. G. Daepf, Marcus J. Hamilton, Geoffrey B. West, Luis M. A. Bettencourt, ?The Mortality of Companies.? 2015	Bibliography	
. Simon Sinek, ?How great leaders inspire action?, TED Talk, <a href="https://www.ted.com/talks/simon_sinek_how_gr eat_leaders_inspire_action">https://www.ted.com/talks/simon_sinek_how_gr eat_leaders_inspire_action</a>	Bibliography	

Brynjolfsson, Erik, and Andrew McAfee. "Race Against the Machine." Lexington, Mass: Digital Frontier Press, 2012.	Bibliography	
Gordon, Robert J. "Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds?," NBER Working Papers 2012.	Bibliography	
Chad Syverson, "Challenges to Mis measurement Explanations for the U.S. Productivity Slowdown? NBER WorkingPapers2016	Bibliography	
Cowen, Tyler, "The Great Stagnation: How America Ate Allthe Low-Hanging Fruit of Modern History, GotSickand Will (Eventually) Feel Better. New York: Dutton Adult, 2011.	Bibliography	
Course slides and material	Others	Available in Moodle platform of EIT Digital during the course.