



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

103000845 - Entrepreneurship And Business Modelling

DEGREE PROGRAMME

10AZ - Master Universitario En Innovación Digital

ACADEMIC YEAR & SEMESTER

2025/26 - Semester 2

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1. Description

1.1. Subject details

Name of the subject	103000845 - Entrepreneurship And Business Modelling
No of credits	6 ECTS
Type	Compulsory
Academic year of the programme	First year
Semester of tuition	Semester 2
Tuition period	February-June
Tuition languages	English
Degree programme	10AZ - Master Universitario en Innovación Digital
Centre	10 - E.T.S. De Ingenieros Informáticos
Academic year	2025-26

2. Faculty

2.1. Faculty members with subject teaching role

Name and surname	Office/Room	Email	Tutoring hours *
Jose Maria Cuellar Del Rio		josemaria.cuellar@upm.es	Sin horario. The tutoring schedule is indicative and subject to possible changes. Please check tutoring times with the faculty member in charge.

Roberto Martinez Gamero	Rectorate	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.
Alberto Tejero Lopez (Subject coordinator)		alberto.tejero@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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3. Prior knowledge recommended to take the subject

3.1. Recommended (passed) subjects

- Introduction To Innovation And Entrepreneurship Ma

3.2. Other recommended learning outcomes

The subject - other recommended learning outcomes, are not defined.

4. Skills and learning outcomes *

4.1. Skills to be learned

CE-EIT04 - Capacidad para desarrollar un proyecto y un modelo completos de negocio orientados al cliente usando una metodología iterativa siguiendo los pasos necesarios para crear una empresa de base tecnológica sostenible incluyendo consideraciones éticas, sociales y medioambientales.

CE-EIT05 - Capacidad para definir el plan de marketing y su expansión internacional para un producto o servicio tecnológico, negociando con otros actores en el área TIC su participación en la cadena de valor, creando una estructura comercial y una estrategia de precios.

CE-EIT06 - Capacidad para reconocer, abordar y sugerir maneras para tratar los diferentes retos (madurez, propiedad intelectual, etc.) en el proceso de explotar una tecnología para crear un negocio.

CE-EIT07 - Capacidad para entender las tendencias globales o de mercado, las rutas de innovación, las redes industriales de valor en un sector (Digital Health, Digital Industry, Smart Cities, etc.), y reconocer su importancia relativa para el desarrollo de un producto o servicio y del negocio.

CE-EIT08 - Capacidad para analizar el negocio potencial, los modelos de negocio o los escenarios comerciales alternativos para una tecnología considerando un nuevo sector de aplicación y/o mercado y evaluar las condiciones de su explotación.

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

CG04 - La capacidad de toma de decisiones y liderazgo de equipos, basada en una comprensión holística de las contribuciones de la educación superior, la investigación y las empresas para la creación de valor, en equipos y contextos de tamaño limitado.

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

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

4.2. Learning outcomes

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

RA92 - Develop a business plan and commercial projects client oriented

RA78 - Understand global/market trends, innovation routes, industry value networks in a thematic area and recognize their relative importance for product/service and business development

RA87 - Identify and assess the impact of ICT technologies and innovations in a thematic area, on its markets and stakeholders (competitors, alliances, networks) and the business opportunities they offer

RA80 - Use knowledge, ideas and technology to create new or significantly improved products, services, processes, policies, new business models or jobs in a real environment

RA79 - Identify and assess the impact of ICT technologies and innovations in a thematic area, on its markets and stakeholders (competitors, alliances, networks) and the business opportunities they offer.

RA81 - Conduct a business analysis, make decisions and formulate recommendations or justify actions in a real environment

RA84 - Perform a business solution planning and development process (dynamics of developing the business, organization needed to implement it, go-to-market)

RA85 - Include ethical, societal and sustainability considerations when developing a new product/technology and business concepts and models, and the required implementing organizations

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

RA93 - Identify and develop innovative business ideas within (intrapreneurship) or outside a preexisting Company (entrepreneurship).

* 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

5.1. Brief description of the subject

This course corresponds to the first part of the Business Development labs which is proposed for the I&E minor. It is offered in the second semester of the 1st year. The objective is to help students in the development of an innovative digital product or service through a business development process with an entrepreneurship approach.

5.2. Syllabus

1. Introduction to entrepreneurship and business modelling
2. Entrepreneurial identity
3. Business model ideation and motivation
4. Market business opportunity
5. Competitive environment
6. Value creation, proposal and delivery
7. Managing and organizing
8. Business ethics and sustainability
9. Resources and capabilities
10. Entry to market strategy
11. Impact quantification
12. Business model writing and presenting

6. Schedule

6.1. Subject schedule*

Week	Type 1 activities	Type 2 activities	Distant / On-line	Assessment activities
1	Subject presentation. Global business environment. Entrepreneurship identity. Duration: 04:00 Lecture			Attendance and participation Other assessment Progressive assessment Presential Duration: 01:00
2	Strategy and business modelling. Duration: 04:00 Lecture			
3	Value proposition. Duration: 04:00 Lecture			
4	Value creation, delivery and capture. Duration: 04:00 Lecture			BDLab Redthread modules Other assessment Progressive assessment Not Presential Duration: 10:00
5	Managing, leading and culture. Duration: 04:00 Lecture			
6	Group assignment and work presentation belonging to the first part of the subject Duration: 04:00 Additional activities			Group assignment and work presentation belonging to the first part of the subject Group work Progressive assessment Presential Duration: 04:00
7	Idea modelling in collaborative projects. Duration: 04:00 Lecture			
8	Writing collaborative projects: Excellence. Duration: 04:00 Lecture			
9	Writing collaborative projects: Impact. Duration: 04:00 Cooperative activities			
10	Writing collaborative projects: Implementation. Duration: 04:00 Lecture			
11	Evaluation, cross-cutting issues. Duration: 04:00 Additional activities			

12	Group assignment and work presentation belonging to the second part of the subject Duration: 04:00 Additional activities			Group assignment and work presentation belonging to the second part of the subject Group work Progressive assessment Presential Duration: 04:00
13				
14				
15				
16				
17	Extraordinary assessment test Duration: 04:00 Additional activities			

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.

7. Activities and assessment criteria

7.1. Assessment activities

7.1.1. Assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
1	Attendance and participation	Other assessment	Face-to-face	01:00	10%	5 / 10	CG03 CG04
4	BDLab Redthread modules	Other assessment	No Presential	10:00	10%	5 / 10	CG04 CG08 CE-EIT04 CE-EIT06 CE-EIT07 CE-EIT08
6	Group assignment and work presentation belonging to the first part of the subject	Group work	Face-to-face	04:00	40%	5 / 10	CG03 CG04 CG07 CG08 CE-EIT04 CE-EIT05 CE-EIT06 CE-EIT07 CE-EIT08
12	Group assignment and work presentation belonging to the second part of the subject	Group work	Face-to-face	04:00	40%	5 / 10	CG03 CG07 CG08 CE-EIT04 CE-EIT05 CE-EIT06 CE-EIT07

7.1.2. Global examination

No se ha definido la evaluación sólo por prueba final.

7.1.3. Referred (re-sit) examination

Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
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Extraordinary assessment test	Written test	Face-to-face	02:30	80%	5 / 10	CG03 CG04 CG07 CG08 CE-EIT04 CE-EIT05 CE-EIT06 CE-EIT07 CE-EIT08
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7.2. Assessment criteria

Progressive assessment

Evaluation activity	Modality	Weight
Attendance and participation	Individual	10%
Group assignment and work presentation belonging to the first part of the subject	Group	40%
Group assignment and work presentation belonging to the second part of the subject	Group	40%
BDLab Redthread modules	Individual	10%

Global assessment test and Extraordinary assessment test

Evaluation activity	Modality	Weight
Assessment test (evaluation of the content belonging to the first and second part of the subject)	Individual	80%

NOTE: The activities that cannot be recovered in the "Global assessment test" and "Extraordinary assessment test" are the following: BDLab Redthread modules (10%) and attendance and participation in class during the course

(10%).

8. Teaching resources

8.1. Teaching resources for the subject

Name	Type	Notes
Newbery, R., Lean, R., Moizer, J. (2018). Entrepreneurial identity formation during the initial entrepreneurial experience: the influence of simulation feedback and existing identity. <i>Journal of Business Research</i> , 85, 51-59	Bibliography	
Carlsson, B., Braunerhjelm, P., McKelvey, M., Olofsson, C., Persson, L., & Ylinenpää, H. (2013). The evolving domain of entrepreneurship research. <i>Small Business Economics</i> , 41(4), 913-930.	Bibliography	
Gruber, M., MacMillan, I. (2017). Entrepreneurial behavior: a reconceptualization and extension based on identity theory. <i>Strategic Entrepreneurship Journal</i> , 11(3), 271-286	Bibliography	

<p>Jones P., Klapper R., Ratten V., Fayolle A. (2018). Emerging themes in entrepreneurial behaviours, identities and contexts. The International Journal of Entrepreneurship and Innovation, 19(4), 233-236.</p>	<p>Bibliography</p>	
<p>Achtenhagen, L., Melin, L., & Naldi, L. (2013). Dynamics of business models?strategizing, critical capabilities and activities for sustained value creation. Long range planning, 46(6), 427-442.</p>	<p>Bibliography</p>	
<p>Boccardelli, P., Magnusson, M. G. (2006). Dynamic capabilities in early phase entrepreneurship. Knowledge and Process Management, 13(3), 162-174.</p>	<p>Bibliography</p>	
<p>Chang, C. (2012). Exploring IT entrepreneurs' dynamic capabilities using Q-technique. Industrial Management & Data Systems, 112(8), 1201-1216.</p>	<p>Bibliography</p>	
<p>Amit, R., & Zott, C. (2001). Value creation in e-business. Strategic management journal, 22(6-7), 493-520.</p>	<p>Bibliography</p>	
<p>Chesbrough, H. (2007). Business model innovation: it is not just about technology anymore. Strategy & Leadership, 35(6), 12-17.</p>	<p>Bibliography</p>	
<p>Morris M., Schindehutte M., Allen J. (2005). The entrepreneurs business model: toward a unified perspective. Journal of Business Research, 58, 726-735</p>	<p>Bibliography</p>	

<p>Ritala, P., & Tidström, A. (2014). Untangling the value-creation and value-appropriation elements of cooperation strategy: A longitudinal analysis on the firm and relational levels. <i>Scandinavian Journal of Management</i>, 30(4), 498-515</p>	<p>Bibliography</p>	
<p>Wirtz B.W., Pistoia A., Ullrich S., Göttel V. (2016). <i>Business Models: Origin, Development and Future Research Perspectives</i>. <i>Long Range Planning</i>, 49(1), 36-54</p>	<p>Bibliography</p>	
<p>Zott, C., Amit, R., & Massa, L. (2011). The business model: recent developments and future research. <i>Journal of management</i>, 37(4), 1019-1042.</p>	<p>Bibliography</p>	
<p>Burström T., Parida V., Lahti T., Wincent J. (2021). AI-enabled business-model innovation and transformation in industrial ecosystems: A framework, model and outline for further research. <i>Journal of Business Research</i>, 127, 85-95.</p>	<p>Bibliography</p>	
<p>Robbins S.P., Coulter M. (2018). <i>Management</i>. Fourteenth (Global) Edition. Pearson</p>	<p>Bibliography</p>	
<p>Ebert R.J., Griffin R.W. (2019). <i>Business Essentials</i>. Twelfth Edition. Pearson</p>	<p>Bibliography</p>	
<p>Bland D.J., Osterwalder A. (2020). <i>Testing business ideas</i>. John Wiley & Sons</p>	<p>Bibliography</p>	

Mishra C.S., Zachary R.K. (2014). The Theory of Entrepreneurship. Palgrave Macmillan.	Bibliography	
Tejero Alberto and Gonzalo León. Ecosistemas de innovación abierta. Medición y gestión. Editorial Sicomoro, 2021	Bibliography	https://p-nt-www-amazon-es-kalias.amazon.es/Ecosistemas-Innovaci%C3%B3n-Abierta-Medici%C3%B3n-Gesti%C3%B3n-ebook/dp/B09NYDW9JG/ref=sr_1_1?qid=1685432105&refinements=p_27%3AGonzalo+Le%C3%B3n+Serrano&s=books&sr=1-1
Gonzalo León, Alberto Tejero et. al., Economía Disruptiva. Escuela de Organización Industrial, 2015	Bibliography	(free download) https://www.eoi.es/es/savia/publicaciones/78574/sectores-de-la-nueva-economia-2020-economia-disruptiva