



INTERNATIONAL
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PR/CL/001



E.T.S. de Ingenieros
Informaticos

ANX-PR/CL/001-01

LEARNING GUIDE

SUBJECT

103000845 - Entrepreneurship And Business Modelling

DEGREE PROGRAMME

10AZ - Master Universitario En Innovación Digital

ACADEMIC YEAR & SEMESTER

2023/24 - 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 - Escuela Técnica Superior De Ingenieros Informáticos
Academic year	2023-24

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.



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.
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.

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

3. Prior knowledge recommended to take the subject

3.1. Recommended (passed) subjects

- Introduction To Innovation And Entrepreneurship Management

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

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).

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

* 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	Classroom activities	Laboratory activities	Distant / On-line	Assessment activities
1	Subject presentation. Global business environment. Entrepreneurship identity. Duration: 04:00			Attendance and participation Continuous assessment Presential Duration: 01:00
2	Strategy and business modelling. Duration: 04:00			
3	Value proposition. Duration: 04:00			
4	Value creation, delivery and capture. Duration: 04:00			BDLab Redthread modules Continuous assessment Not Presential Duration: 10:00
5	Managing, leading and culture. Duration: 04:00			
6	Student Evaluation. Duration: 04:00			Group assignment and work presentation belonging to the first part of the subject Continuous assessment and final examination Presential Duration: 04:00
7	Idea modelling in collaborative projects. Duration: 04:00			
8	Writing collaborative projects: Excellence. Duration: 04:00			
9	Writing collaborative projects: Impact. Duration: 04:00			
10	Writing collaborative projects: Implementation. Duration: 04:00			

11	Evaluation, cross-cutting issues. Duration: 04:00			
12	Group presentations Duration: 04:00			Group assignment and work presentation belonging to the second part of the subject Continuous assessment Presential Duration: 04:00
13				
14				
15				
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. Assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
1	Attendance and participation		Face-to-face	01:00	10%	5 / 10	CG03 CG04
4	BDLab Redthread modules		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		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		Face-to-face	04:00	40%	5 / 10	CG03 CG07 CG08 CE-EIT04 CE-EIT05 CE-EIT06 CE-EIT07

7.1.2. Global examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
6	Group assignment and work presentation belonging to the first part of the subject		Face-to-face	04:00	40%	5 / 10	CG03 CG04 CG07 CG08 CE-EIT04 CE-EIT05 CE-EIT06 CE-EIT07 CE-EIT08

7.1.3. Referred (re-sit) examination

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

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
Newberry, 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	

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Boccardelli, P., Magnusson,M. G. (2006). Dynamic capabilities in early phase entrepreneurship. Knowledge and Process Management, 13(3), 162-174.	Bibliography	
Chang, C. (2012). Exploring IT entrepreneurs' dynamic capabilities using Q-technique. Industrial Management & Data Systems, 112(8), 1201-1216.	Bibliography	
Amit, R., & Zott, C. (2001). Value creation in e-business. Strategic management journal, 22(6-7), 493-520.	Bibliography	
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Morris M., Schindehutte M., Allen J. (2005). The entrepreneurs business model: toward a unified perspective. Journal of Business Research, 58, 726-735	Bibliography	

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



Mishra C.S., Zachary R.K. (2014). The Theory of Entrepreneurship. Palgrave Macmillan.	Bibliography	
Tejero Alberto and Gonzalo Léon. 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 Léon, 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