



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

103000848 - Innovation And Entrepreneurship Study

DEGREE PROGRAMME

10AZ - Master Universitario En Innovación Digital

ACADEMIC YEAR & SEMESTER

2023/24 - Semester 1

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1. Description

1.1. Subject details

Name of the subject	103000848 - Innovation And Entrepreneurship Study
No of credits	6 ECTS
Type	Compulsory
Academic year of the programme	Second year
Semester of tuition	Semester 3
Tuition period	September-January
Tuition languages	English
Degree programme	10AZ - Master Universitario en Innovación Digital
Centre	10 - Escuela Tecnica Superior De Ingenieros Informaticos
Academic year	2023-24

2. Faculty

2.1. Faculty members with subject teaching role

Name and surname	Office/Room	Email	Tutoring hours *
Federico Garcia-Linares Fontes	5219	f.garcia-linares@upm.es	Sin horario. Via email
Raul Gutierrez Sanchis (Subject coordinator)	5218	raul.g.sanchis@upm.es	Sin horario. Via email
Sergio Jose Rios Aguilar	5215	sergio.rios@upm.es	Sin horario. Via email

Jorge Pablo Diaz Velilla	5216	jorge.diaz.velilla@upm.es	Sin horario. Via email
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* 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

- Entrepreneurship And Business Modelling

3.2. Other recommended learning outcomes

- Business Plans, Cost-Benefit Analysis, Sectorial Analysis

4. Skills and learning outcomes *

4.1. Skills to be learned

CB07 - Que los estudiantes sepan aplicar los conocimientos adquiridos y su capacidad de resolución de problemas en entornos nuevos o poco conocidos dentro de contextos más amplios (o multidisciplinares) relacionados con su área de estudio

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

CB09 - Que los estudiantes sepan comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan a públicos especializados y no especializados de un modo claro y sin ambigüedades

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.

CG06 - Capacidad para gestionar la información.

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

RA103 - Being able to understand the data science's implications for management and decision making in a datarich environment.

RA70 - Manage bibliographic sources in the domain, including manuals, online documentation and scientific papers

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

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

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

RA102 - Being able to translate a data insight into a business decision and action.

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

RA88 - Choose and apply relevant concepts/methods and/or tools and collect relevant data for conducting a business research analysis in a real environment

RA91 - Produce a professional speech and writing on a business analysis topic

RA90 - Conduct a business analysis, make decisions and formulate recommendations or justify actions in a real environm

RA92 - Develop a business plan and commercial projects client oriented

* 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

The I&E study course includes a mandatory online content organized in three online modules:

? Assessing the Impact of Technology focuses on how to evaluate the impact of technology for a specific industry of interest, to analyze the historical and current trends in an industry, and based on this to predict the impact of a technology in the near future (10-20 years-time);

? Business research methodology helps students to learn more on understanding concepts on how to: conduct business research and science; craft research design; extrapolate evidence from field work and analysis for case research; move from business challenge to research problem; implement the planning process in practice; draft reporting on a case research, etc

? How to make a market entry / grow on a new market offers insights on go to market strategies starting from customer & market focus, to being concluded with market-launch or market expansion (in the case of international scale-up).

5.2. Syllabus

1. Assessing the Impact of Technology
2. How to make a market entry / grow on a new market
3. Business research methodology
4. Business case in real context

6. Schedule

6.1. Subject schedule*

Week	Classroom activities	Laboratory activities	Distant / On-line	Assessment activities
1			Assessing the Impact of Technology Duration: 03:00	Online module assignment Continuous assessment Not Presential Duration: 00:00
2			Business Research Methodology Duration: 04:00	
3			How to make a market entry / grow on a new market Duration: 04:00	
4				Final Individual Assignment Continuous assessment Not Presential Duration: 04:00
5			Business Case Duration: 04:00	
6			Business Case Duration: 04:00	
7			Business Case Duration: 04:00	
8			Business Case Duration: 04:00	
9			Business Case Duration: 04:00	
10			Business Case Duration: 04:00	
11			Business Case Duration: 04:00	
12			Business Case Duration: 04:00	

13			Business Case Duration: 04:00	
14			Business Case Duration: 04:00	
15				Group assignment Continuous assessment Presential Duration: 04:00
16				Online module assignment Final examination Not Presential Duration: 00:00 Final Individual Assignment Final examination Not Presential Duration: 04:00 Group assignment Final examination Presential Duration: 04:00
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	Online module assignment		No Presential	00:00	17%	5 / 10	CE-EIT07 CE-EIT08
4	Final Individual Assignment		No Presential	04:00	17%	5 / 10	CG03 CG06 CG07 CG08 CG09
15	Group assignment		Face-to-face	04:00	66%	5 / 10	CB07 CB08 CB09

7.1.2. Global examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
16	Online module assignment		No Presential	00:00	17%	5 / 10	
16	Final Individual Assignment		No Presential	04:00	17%	5 / 10	
16	Group assignment		Face-to-face	04:00	66%	5 / 10	

7.1.3. Referred (re-sit) examination

No se ha definido la evaluación extraordinaria.

7.2. Assessment criteria

The final grade is based for approximately 2/3 (or 65%) on the group work and 1/3 (or 35%) on the online work grade.

a) Online work evaluation criteria

Online work grade is split into two components: Online module assignment and final individual assignment. Each of them counts 50% in the final grade of the online work grade.

b) Group assignment

The assessment is based on a written group report. Beyond the company recommendations and potential solutions, the report includes a description of the challenges faced by students, the decision-making points and the ways they addressed them. It also describes the team organization and the specific contributions of the team members. The report should be 10 to 15 pages long + annexes. Assessment may include an oral presentation of the work in front of a jury composed of case provider(s) and the teacher.

8. Teaching resources

8.1. Teaching resources for the subject

Name	Type	Notes
EIT Digital own materials	Web resource	

9. Other information

9.1. Other information about the subject

The course is composed by two components: a) Online work, where students will go through online content on assessing a technology and its business analysis; b) Group work, where a team will work addressing a real-life case for a partner company conducting the business analysis, providing recommendations and potential solutions.

The independent study hours are training activities during which students should spend time on individual study or individual assignments.

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 subject schedule is based on a previous theoretical planning of the subject plan and might go through experience some unexpected changes along throughout the academic year.

Online modules:

? Assessing the Impact of Technology

? Business Research Methodology

? How to make a market entry / grow on a new market

The subject is related to SDGs 1, 4, 8, 9, 10 and 12

This subject applies teaching innovation techniques such as e-learning, blended learning, hybrid education, among other pedagogical components.