ANX-PR/CL/001-01

LEARNING GUIDE

SUBJECT

103000824 - I And E Study

DEGREE PROGRAMME

10AX - Master Universitario Innovación Digital Ciencia De Datos Itinerario Health

ACADEMIC YEAR & SEMESTER

2020/21 - Semester 1

Index

Learning guide

1. Description

1.1. Subject details

Name of the subject	103000824 - I And e Study
No of credits	6 ECTS
Type	Compulsory
Academic year ot the programme	Second year
Semester of tuition	Semester 3
Tuition period	September-January
Tuition languages	English
Degree programme	10AX - Master Universitario Innovación Digital Ciencia de Datos Itinerario Health
Centre	10 - Escuela Tecnica Superior De Ingenieros Informaticos
Academic year	2020-21

2. Faculty

2.1. Faculty members with subject teaching role

Name and surname	Office/Room	Email	Tutoring hours *
Raul Gutierrez Sanchis (Subject coordinator)		raul.g.sanchis@upm.es	- -

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

PR/CL/001
COORDINATION PROCESS OF
LEARNING ACTIVITIES

ANX-PR/CL/001-01
LEARNING GUIDE

E.T.S. de Ingenieros
Informaticos

3. Skills and learning outcomes *

3.1. 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.

PR/CL/001
COORDINATION PROCESS OF
LEARNING ACTIVITIES

ANX-PR/CL/001-01
LEARNING GUIDE

E.T.S. de Ingenieros
Informaticos

3.2. Learning outcomes

RA47 - Develop a business plan and commercial projects client oriented

RA39 - Perform a business solution planning and development process (dynamics of developing the business, organization needed to implement it, go-to-market).

RA46 - 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.

RA36 - Include ethical, societal and sustainability considerations when developing a new product/technology and business concepts and models, and the required implementing organizations.

RA37 - Understand global/market trends, innovation routes, industry value networks in a thematic area and recognize their relative importance for product/service and business development.

* 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.

4. Brief description of the subject and syllabus

4.1. 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).

PR/CL/001
COORDINATION PROCESS OF
LEARNING ACTIVITIES

ANX-PR/CL/001-01
LEARNING GUIDE

E.T.S. de Ingenieros
Informaticos

4.2. 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

PR/CL/001
COORDINATION PROCESS OF
LEARNING ACTIVITIES

ANX-PR/CL/001-01
LEARNING GUIDE

E.T.S. de Ingenieros
Informaticos

5. Schedule

5.1. Subject schedule*

Week	Face-to-face classroom activities	Face-to-face 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	

PR/CL/001
COORDINATION PROCESS OF
LEARNING ACTIVITIES

ANX-PR/CL/001-01
LEARNING GUIDE

E.T.S. de Ingenieros
Informaticos

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.

PR/CL/001
COORDINATION PROCESS OF
LEARNING ACTIVITIES

ANX-PR/CL/001-01
LEARNING GUIDE

E.T.S. de Ingenieros
Informaticos

6. Activities and assessment criteria

6.1. Assessment activities

6.1.1. Continuous assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
1	Online module assignment		No Presential	00:00	17%	5 / 10	CB09 CG06 CE-EIT08 CE-EIT07
4	Final Individual Assignment		No Presential	04:00	17%	5 / 10	CE-EIT08 CE-EIT07
15	Group assignment		Face-to-face	04:00	66%	5 / 10	CE-EIT08 CE-EIT07

6.1.2. Final 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	

6.1.3. Referred (re-sit) examination

No se ha definido la evaluación extraordinaria.

PR/CL/001
COORDINATION PROCESS OF
LEARNING ACTIVITIES

ANX-PR/CL/001-01
LEARNING GUIDE

E.T.S. de Ingenieros
Informaticos

6.2. 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.

7. Other information

7.1. 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.

PR/CL/001
COORDINATION PROCESS OF
LEARNING ACTIVITIES

ANX-PR/CL/001-01
LEARNING GUIDE

E.T.S. de Ingenieros
Informaticos

* The subject schedule is based on a previous theorical planning of the subject plan and might go to 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