

**COURSE DATA****DATA SUBJECT**

Code: 36522
Name: Technology and Innovation Management
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1332 - Degree in Business Intelligence and Analytics	Facultat d'Economia	2	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1332 - Degree in Business Intelligence and Analytics	Direcció de la Tecnologia y la Innovació	COMPULSORY

COORDINATION

ALEGRE VIDAL JOAQUIN

SUMMARY

This subject provides an overview to the technology and innovation management field, paying special attention to the meaning and implications of the technological change, the innovation types and the strategies oriented to promote innovation at the firm's level. The content is structured in two parts. First one introduces and develops the basic concepts surrounding the technology and innovation management: technology basis, innovation basis, innovative organization and new approaches in innovation. The second part introduces the 3 key stages in the management of innovation: exploration, development and exploitation. The students are expected to learn the main tools being used in each of these stages. Next, an overview to the main innovation databases both at the enterprise and territorial level. Finally, the program ends by presenting the main programs and institutions giving support to the innovation.

>

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS



It is recommended to have passed the subject "Dirección Estratégica", in the first course of the degree

COMPETENCES / LEARNING OUTCOMES

1332 - Degree in Business Intelligence and Analytics

Be able to analyse and search for information from diverse sources.

Be able to learn autonomously.

Be able to plan, organise, monitor and evaluate the implementation of business strategies.

Be able to work in a team demonstrating commitment to quality, ethics, equality and social responsibility.

Demonstrate skills for analysis and synthesis.

Reach strategic diagnoses in complex and uncertain environments using appropriate methodologies.

DESCRIPTION OF CONTENTS

1. TECHNOLOGY BASIS

- Technology function
- Technological change
- Technology and enterprise

2. INNOVATION BASIS

- R&D
- Innovation concept
- Types of innovation
- Innovation diffusion
- Innovation strategy

3. INNOVATIVE ORGANIZATION

- Innovation process



- Organization
- Managerial abilities
- Human resources
- Firm's culture

4. NEW APPROACHES IN INNOVATION

- Blue ocean strategy
- Open Innovation
- Design Thinking and co-creation processes with customers
- Lean Startup
- Frugal Innovation

5. ENVIROMENTAL SUPPORT FOR INNOVATION

- Start-ups, Venture Capital and Business Angels
- Incubators and accelerators
- Institutions and Programmes supporting innovation

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Computer classroom practice	30,00
Total hours	60,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	90,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	90,00



TEACHING METHODOLOGY

Participatory lectures, to present the essential theoretical contents in the classroom.

Problem solving, case studies at the individual and team level.

Practical exercises, oral presentations, debates.

Application of methodologies and tools linked to innovation management.

EVALUATION

1.- Exam: 4 points (2 points are required to pass the subject)

2.-Practice individual and group assignments including oral presentations: 6 points (3 points are required to pass the subject))

Alternatively, practice assignments might be assessed through an additional task in the exam.

REFERENCES

BASIC BIBLIOGRAPHICAL REFERENCES

- OECD. (2018). The Measurement of Scientific and Technological Activities. Proposed Guidelines for Collecting and Interpreting Technological Data. Oslo Manual. OECD, Paris.
- TIDD, J., BESSANT, J. (2021), Managing Innovation, John Wiley and Sons, London
- Trott, P. (2021). Innovation Management and New Product Development. Pearson: Harlow.
- Lavie, D. (2021). The cooperative economy: A solution to societal grand challenges. Routledge: London.

COMPLEMENTARY BIBLIOGRAPHICAL REFERENCES

- March, I. (2017). Elegidos o atrapados, <http://www.innovaavant.com/mi-nuevo-libro/>
- Fundación COTEC (2020): Informe COTEC, 2020, Fundación Cotec, Madrid
- Ries, E. (2011). The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business, New York.