

### **TECHNICAL SHEET OF THE SUBJECT**

Data of the subject		
Subject name	Strategic Technology Management	
Subject code	E000011597	
Mainprogram	Official Master's Degree in Business Administration - MBA	
Involved programs	Máster Universitario en Administración de Empresas (MBA) [First year]	
Level	Postgrado Oficial Master	
Quarter	Semestral	
Credits	2,0 ECTS	
Туре	Optativa	
Coordinator	Blanca Moro Cañada (bmoro@icade.comillas.edu)	
Schedule	upon request by email	
Course overview	Knowledge and understanding of tools and methods of innovation and technology management in organisations, aiming at exploiting potential competitive advantages. Key determinants of technology strategies are analysed, particularly those involved in the organisational context. Strategies for exploiting and selling technology are also analysed.	

Teacher Information		
Teacher		
Name	Blanca Moro Cañada	
Department	Departamento de Gestión Empresarial	
EMail	bmoro@icade.comillas.edu	

### SPECIFIC DATA OF THE SUBJECT

# **Contextualization of the subject**

### Contribution to the professional profile of the degree

Technology and innovation need to be managed. The speed at which companies need to adapt and respond to constant changes has increased. Managers and executives of corporations and startups need to understand technological trends, how they may impact their company strategy and develop a course of action. Being better at this leads to better product development and ultimately a winning strategy.

In this course I will also condense my strategic learnings as a venture capitalist, founder and startup operator. The things I learned the hard way. The things I hope I had known. And how technology can reshape a sector and produce huge winners and make other companies irrelevant.

Course objectives:

Provide students with frameworks to understand technological trends and cycles.

Understand how technology affects competitive strategy.



Have an understanding of some of the current technological trends and their potential.

Provide a set of tools for corporate and startup managers to engage in the marketplace.

Learn the basics of product development planning and execution.

### **Prerequisites**

None

Competencies - Objectives				
Competences				
GENERALES				
CG01	Analytic and synthesis cognitive capacities applied to business situations and managing and organisation problems.			
CG02	Management of data and information as key elements for decision-making and for identification, formulation and resolution of business problems.			
CG03	Problem-solving and decision-making skills at a strategic, tactic and operational level with regard to a business, considering the interrelationship between the different functional and business areas.			

Knowledge, understanding and handling of tools for diagnosis of the competitive position of a company, and designing

### THEMATIC BLOCKS AND CONTENTS

and executing the company's strategic plan.

#### **Contents - Thematic Blocks**

Technological evolution and trends

Technology and competitive strategy

Why startups win

**CG**09

What can corporates do

Product development and execution

### **TEACHING METHODOLOGY**

### General methodological aspects of the subject

### **Use of Artificial Intelligence (AI)**

Students are encouraged to make thoughtful use of Al tools as part of their learning process. The following guidelines apply:

• **Encouraged use:** All may be used to support research, structuring of ideas, and drafting of assignments.



• **Student responsibility:** Regardless of AI use, students remain fully responsible for understanding and mastering the content of their work. They must have complete knowledge and control over all material they submit.

### **In-class Methodology: Activities**

#### Lectures

- Instructors will promote debate during theoretical lectures.
- Students must come to lectures with all the pre-reading and pre-viewing done.
- Attendance and participation are essential requirements for the effectiveness of the lecturing sessions.

CG01, CG02, CG03

Presentations by industry professionals.

### **Non-Presential Methodology: Activities**

Individual reading and viewing. Students will need to read and view required materials before attending each lecture.

Individual memos. Students will need to write 5 memos (1 page maximum each). These memos will all be related to each other and follow a storyline.

- Technology trend. Chosen by the student and validated by instructor.
- Industry this trend affects and could reshape and why.
- Startup related to this trend and why it could win in the marketplace.
- Corporate (listed company or sufficiently mature) that is affected by this trend and how it can defend.
- Product that could be developed (by the corporate or by a new company) to capture the opportunities in the technology space.

CG01, CG02, CG03, CG09

Tutorials

Students will have a chance to meet with the course instructor individually and outside the class if required.

### **SUMMARY STUDENT WORKING HOURS**

CLASSROOM HOURS					
Lectures of an expository nature	Analysis and resolution of cases and exercises, individually or collectively				
15.00	5.00				
NON-PRESENTIAL HOURS					
Study and documentation	Monographic and research work, individual or group work				
15.00	15.00				
	ECTS CREDITS: 2,0 (50,00 hours)				



The use of AI to produce full assignments or substantial parts thereof, without proper citation of the source or tool used, or without explicit permission in the assignment instructions, will be considered plagiarism and therefore subject to the University's General Regulations.

Evaluation activities	Evaluation criteria	Weight
Final Exam	Knowledge of the subject.  To pass the subject, students must obtain a 5/10 in the exam.  The final exam will be handwritten and must be completed without the use of Al tools.	40 %
3 Memos (10% per Memo)	Knowledge of the subject.  Clarity of thinking in exposing topic succinctly (max. 2 pages per memo)  Supporting choices and arguments with clear reasoning and data.  Ability to relate each memo to the others.	30
Attendance and participation	Active participation in the class.  Students can present technology trend news, startup news or corporate moves to the class to enrich discussions.	20
Short presentation (5-7 minutes) on a technology trend, product or company and why it matters	Ability to support why the chosen trend, product or company matters.  Ability to support why and how it could impact the market.  Clarity and simplicity in the exposition of the arguments.  Special importance will be given to the oral defense of written work. Students must be able to explain and justify their submissions without any external support.	10 %



Resits: if the overall grade is under 5/10, students can resit the exam or memos under that grade.

Students with an attendance waiver: the rest of the activities will proportionally amount to 100% of the grade.

### **BIBLIOGRAPHY AND RESOURCES**

## **Basic Bibliography**

Perez, Carlota. 2014. Technological revolutions and financial capital: the dynamics of bubbles and golden ages. Cheltenham [England]: Edward Elgar.

Christensen, Clayton M. 1997. The innovator's dilemma: when new technologies cause great firms to fail. Boston, Mass: Harvard Business School Press.

Cagan, Marty. 2018. Inspired: how to create tech products customers love. Hoboken, New Jersey: John Wiley & Sons, Inc.

### **Complementary Bibliography**

Burgelman, Robert A., Clayton M. Christensen, and Steven C. Wheelwright. 2009. Strategic management of technology and innovation. Boston: McGraw-Hill Irwin.

Geoffrey Moore. 2014. Crossing The Chasm. Harper Collins.