TECHNICAL SHEET OF THE SUBJECT

Data of the subject	
Subject name	Gestión Estratégica de la Tecnología
Subject code	E000011597
Involved programs	Máster Universitario en Administración de Empresas (MBA) [Primer Curso]
Level	Postgrado Oficial Master
Quarter	Semestral
Credits	2,0 ECTS
Type	Optativa
Coordinator	Álvaro Sanz Sieteiglesias (agsanz@icade.comillas.edu)
Schedule	upon request
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	Álvaro Gabriel Sanz Sieteiglesias
Department	ICADE Business School
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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.

Course objectives:

Provide students with frameworks to understand technological trends and cycles.

Understand how technology affects competitive strategy.

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

Learn the basics of product development planning and execution. Taking into account the previous knowledge to better increase the chances of success.

Prerequisites
None

Competencies - Objectives

Competences

GENERALES

CG01		Capacidades cognitivas de análisis y síntesis aplicadas a situaciones de negocios y problemáticas organizativas de gestión.
	RA01	Describe, relaciona e interpreta situaciones y planteamientos de nivel elevado de complejidad.
	RA02	Selecciona los elementos más significativos y sus relaciones en las situaciones planteadas.
	RA03	Identifica las carencias de información y establece relaciones con elementos externos a la situación planteada.
CG02		Gestión de la información y de datos como elementos clave para la toma de decisiones y la identificación, formulación y resolución de problemas empresariales.
	RA01	Busca, conoce, extrae y utiliza adecuadamente datos primarios y secundarios procedentes de diversas fuentes.
	RA02	Discierne el valor y la utilidad de diferentes fuentes y tipos de información.
CG03		Resolución de problemas y toma de decisiones en los niveles estratégico, táctico y operativo de una organización empresarial, teniendo en cuenta la interrelación entre las diferentes áreas funcionales y de negocio.
	RA01	Reconoce las alternativas y las dificultades de decisión en casos reales.
	RA02	Realiza actividades y elabora trabajos en los que contempla distintas aproximaciones, las evalúa y propone soluciones.
	RA03	Muestra un equilibrio entre seguridad y riesgo cuando se le plantean opciones en casos complejos y asume la responsabilidad de esas opciones.
CG09		Capacidad de aprendizaje autónomo para seguir formándose para aprender a aprender las habilidades cognitivas y los conocimientos relevantes aplicados a la actividad profesional y empresarial.
	RA01	Lee, sintetiza y comprende críticamente materiales bibliográficos de referencia, así como materiales que presentan resultados de investigaciones, memorias, textos de supervisión profesional, y otros materiales de carácter aplicado.
	RA02	Desarrolla habilidades necesarias para la investigación independiente.

THEMATIC BLOCKS AND CONTENTS

Contents - Thematic Blocks
Technological evolution and trends Technology and competitive strategy Industry context Why startups win What can corporates do Product development and execution

TEACHING METHODOLOGY

General methodological aspects of the subject	
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. Presentations by industry professionals.	CG01, CG02, CG03
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. Tutorials Students will have a chance to meet with the course instructor individually and outside the class if required.	CG01, CG02, CG03, CG09

SUMMARY STUDENT WORKING HOURS

CLASSROOM HOURS	
Lecciones de carácter expositivo	Análisis y resolución de casos y ejercicios, individuales o colectivos
15.00	5.00
NON-PRESENTIAL HOURS	
Estudio y documentación	Trabajos monográficos y de investigación, individuales o colectivos
20.00	20.00
	ECTS CREDITS: 2,0 (60,00 hours)

EVALUATION AND CRITERIA

Evaluation activities	Evaluation criteria	Weight
Final Exam	Knowledge of the subject. To pass the subject, students must obtain a 5/10 in the exam	30 %
Memos (10% per memo)	Knowledge of the subject. Clarity of thinking in exposing topic succinctly. Supporting choices and arguments with clear reasoning and data. Ability to relate each memo to the others.	50 %
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 %

Ratings
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.