



COMILLAS

UNIVERSIDAD PONTIFICIA

ICAI

ICADE

CIHS

GUÍA DOCENTE

2026 - 2027

FICHA TÉCNICA DE LA ASIGNATURA

Datos de la asignatura	
Nombre completo	Negocios Digitales/Digital Business
Código	E000013728
Título	Máster Universitario en Análisis de Negocio / Master in Business Analytics por la Universidad de Deusto y la Universidad Pontificia Comillas [MUBA 24]
Impartido en	Máster Universitario en Análisis de Negocio / Master in Business Analytics [Primer Curso]
Nivel	Posgrado Oficial Master
Cuatrimestre	Semestral
Créditos	3,0 ECTS
Carácter	Obligatoria
Departamento / Área	Departamento de Gestión Empresarial
Responsable	Alejandro Cadenas
Horario	Consultar horario en base al curso académico.
Horario de tutorías	Solicitar cita previa por email al profesorado que imparte la asignatura
Descriptor	Digital technologies, cloud architectures, data analytics, and artificial intelligence are fundamentally reshaping industries, value chains, and competitive landscapes. This course addresses the strategic "WHY" behind digital business models, leaving technical execution ("HOW") to specialized analytical modules. Students will analyze how pure-players and incumbent enterprises create, deliver, and capture value in today's economy. The course transitions from foundational concepts and platform dynamics into a practical, structured framework: the "Digital Business Model Map", equipping students with a hands-on methodology to architect, monetize, and scale data-centric and autonomous business ventures.

Datos del profesorado	
Profesor	
Nombre	Alejandro Cadenas González
Departamento / Área	ONEXED
Correo electrónico	acadenasg@icade.comillas.edu

DATOS ESPECÍFICOS DE LA ASIGNATURA

Contextualización de la asignatura
Aportación al perfil profesional de la titulación
The Digital Business course provides students with an in-depth understanding of how digital technologies transform business models, strategies, and operations. It will equip students with key competencies in digital technologies applied to business, business options to leverage the digital capabilities, data analytics, and specific strategies, essential for professional profiles in business administration, marketing, and entrepreneurship. Students will develop practical and strategic skills, enabling them to lead digital transformation in their future organizations, effectively adapting to and responding to an ever-evolving business environment.



Prerrequisitos

Although no previous knowledge is specifically required, to fully leverage the Digital Business course and gain maximum benefit, students should ideally possess a basic understanding of business principles, some basic level of marketing concepts and some basic digital literacy.

Competencias - Objetivos

Competencias

Conocimientos o contenidos

CO1	Conocer los principales rasgos y tendencias del ecosistema digital, los principales modelos de negocio digitales y el ciclo de las startups.
CO2	Conocer y saber aplicar herramientas de análisis estratégico en el mundo digital, con especial énfasis en el conocimiento de la competencia (Crunchbase, Buzzsumo, etc.) y de tendencias (Google Trends).

Resultados de Aprendizaje

CO1	Conocer los principales rasgos y tendencias del ecosistema digital, los principales modelos de negocio digitales y el ciclo de las startups.
CO2	Conocer y saber aplicar herramientas de análisis estratégico en el mundo digital, con especial énfasis en el conocimiento de la competencia (Crunchbase, Buzzsumo, etc.) y de tendencias (Google Trends).

BLOQUES TEMÁTICOS Y CONTENIDOS

Contenidos – Bloques Temáticos

1. THE DIGITAL & AGENTIC PARADIGM: FOUNDATIONS & TRANSFORMATION

Focus: Setting the strategic baseline, understanding digital disruption, and launching class debates.

- Evolution of the Digital Economy
- Understanding Digital Business and Drivers of Digital Value Creation
- The Core Business Model Concept and Key Concepts in Digital Business

2. PLATFORM ECONOMIES, ECOSYSTEMS & PURE-PLAYER TAXONOMIES

Focus: Understanding types of DBMs, two-sided markets, network effects, and deconstructing successful platform models.

- Taxonomies of Digital Businesses
- Platform Economics & Multi-Sided Markets
- Ecosystem Architecture
- Case Analysis of Pure-Players

3. INTRODUCTION TO THE "DIGITAL BUSINESS MODEL MAP" & STRATEGIC DESIGN

Focus: Introducing the central framework of the course and mastering Value Proposition & Strategy Design.



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- Unveiling the Framework
- Key steps in the design of a DB

4. REVENUE ENGINES, MONETIZATION & UNIT ECONOMICS

Focus: Deep dive into Block 4 of the Map. Capturing value, modern pricing taxonomies, and financial sustainability.

- Modern Revenue Engines
- Unit Economics of Digital Models

5. EXECUTION, DATA-CENTRIC OPERATIONS & GOVERNANCE

Focus: Operationalizing the model, scaling, and managing growth.

- Executing Digital Businesses
- Data-Centric Operations
- Key Performance Indicators (KPIs)

6. FUTURE FRONTIERS & CAPSTONE BOARDROOM DEFENSE

Focus: Exploring emerging tech frontiers and defending the complete Digital Business Model Map.

- Emerging Frontier Technologies
- Capstone Final Defense

METODOLOGÍA DOCENTE

Aspectos metodológicos generales de la asignatura

This course is designed as an immersive, executive-level learning laboratory that bridges theoretical strategy and real-world execution. Adopting a **Action-Learning methodology**, traditional long-format lectures are replaced by high-impact executive keynotes ("*The WHY*"), real-time case debates, and hands-on strategic design workshops.

Central to the course is the **Digital Business Model Map**, a structured framework that students build progressively session by session using AI-assisted tools and collaborative dynamics.

In every session, students actively transition between the roles of digital entrepreneurs, strategy consultants, and C-suite decision-makers, pitching concepts, defending unit economics, and solving simulated operational crises. The classroom functions as an executive boardroom where peer review, critical questioning, and public speaking are as fundamental to learning as strategic theory, ensuring students graduate with both conceptual mastery and actionable leadership skills.

RESUMEN HORAS DE TRABAJO DEL ALUMNO

HORAS PRESENCIALES



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AF1. Lecciones de carácter expositivo. Sesiones en las que los docentes exponen contenidos concretos, que pueden estar apoyados o no por recursos tecnológicos, en la que existirán periodos de explicación a cuestiones o dudas planteadas por los estudiantes.	AF2. Exposición pública de temas o trabajos. Los estudiantes presentarán en el aula de manera individual o en grupo, con apoyo de medios audiovisuales, los temas que les hayan encargado los docentes o que hayan elegido libremente, dentro de un conjunto de contenidos de la asignatura.	AF3. Ejercicios y resolución de casos y de problemas. Sesiones en las que los docentes realizan de manera individual o junto con los estudiantes problemas, casos o cualquier tipo de ejercicio pertinente vinculado con la actualidad de la materia y/o con empresas u organizaciones reales, para la adquisición de competencias de las asignaturas.
15.00	10.00	5.00
HORAS NO PRESENCIALES		
AF8. Trabajos monográficos y de investigación, individuales o colectivos. Los estudiantes trabajan de manera individual o colectiva un tema objeto de estudio relacionado con una asignatura o materia y/o con empresas u organizaciones reales, mediante la búsqueda de información, el análisis y la elaboración de documentos.	AF7. Estudio y lectura organizada. Tiempo de estudio por parte del estudiante dedicado a preparar, profundizar y analizar en los contenidos de las asignaturas o materias, así como realizar ejercicios prácticos.	
10.00	5.00	
CRÉDITOS ECTS: 3,0 (45,00 horas)		

EVALUACIÓN Y CRITERIOS DE CALIFICACIÓN

El uso de IA para crear trabajos completos o partes relevantes, sin citar la fuente o la herramienta o sin estar permitido expresamente en la descripción del trabajo, será considerado plagio y regulado conforme al Reglamento General de la Universidad.

Actividades de evaluación	Criterios de evaluación	Peso
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Final Project	1. Strategic & Market Viability (30%) Evaluates the clarity, uniqueness, and market fit of the value proposition. Assesses how effectively data, platform dynamics, and AI capabilities (the "Secret Sauce") are leveraged to solve a real industry problem and create defensible competitive moats. 2. Financial Mechanics & Unit Economics (25%) Assesses the logic and strategic alignment of the monetization model (e.g., Subscription, Outcome-based, Freemium). Evaluates the rigor and realism of the financial assumptions, including Customer Acquisition Cost (CAC), Lifetime Value (LTV), margins, and value capture mechanisms. 3. Operational Scalability & Governance (20%) Evaluates the feasibility of the execution and scaling strategy (Asset-light vs. Asset-heavy). Assesses the approach to data-centric operations, privacy (GDPR), regulatory compliance (e.g., EU AI Act), and risk management. 4. General understanding of the key topics (25%)	45 %
Group assignments	Cohesion & Executive Delivery: Professional structure, clear team alignment, and the ability to persuasively present and defend the group's solution under peer review. Analytical Quality & Critical Thinking: Active contribution of well-founded, insightful arguments and sharp questioning during case discussions, debates, and peer reviews.	30 %
Continuous evaluation based on discussions in class and active participation	Active Engagement & Value-Add: Regular, insightful contributions to class debates, case discussions, and peer reviews, demonstrating critical thinking and constructive questioning that elevates the group's learning environment.	10 %



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Individual assignments	Consistency & Engagement: Timely, high-quality execution of individual tasks, demonstrating independent critical thinking and mastery of core concepts.	15 %
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BIBLIOGRAFÍA Y RECURSOS

Bibliografía Básica

Contents uploaded to Moodle and discussed in class

Bibliografía Complementaria

- Platform Revolution: How Networked Markets Are Transforming the Economy - and How to Make Them Work for You - W. W. Norton & Company - Geoffrey G. Parker, Marshall W. Van Alstyne, and Sangeet Paul Choudary
- Co-Intelligence: Living and Working with AI - Portfolio / Penguin - Ethan Mollick
- Machine, Platform, Crowd: Harnessing Our Digital Future - W. W. Norton & Company - Andrew McAfee and Erik Brynjolfsson
- Lean Analytics: Use Data to Build a Better Startup Faster - O'Reilly Media - Alistair Croll and Benjamin Yoskovitz
- The Digital Transformation Roadmap: Rebuild Your Organization for Continuous Change - Columbia Business School Publishing - David L. Rogers
- Supremacy: AI, ChatGPT, and the Race That Will Change the World - St. Martin's Press - Parmy Olson
- The Fourth Industrial Revolution - Crown Business - Klaus Schwab
- Competing in the Age of AI: Strategy and Leadership When Algorithms and Networks Run the World - Harvard Business Review Press - Marco Iansiti and Karim R. Lakhani
- The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail - Harvard Business Review Press - Clayton M. Christensen
- The Thinking Machine: Jensen Huang, Nvidia, and the World's Most Coveted Microchip - Simon & Schuster - Stephen Witt