

Mandatory

IT & INNOVATION STRATEGY

2 ECTS

LEARNING OBJECTIVES

- **Key elements of an information system:** Identify and differentiate the elements that make up an information system; applications, architecture and infrastructure, among others.
- **Information management:** Understand the importance of Information Technology in business today and understand the key issues surrounding data and information management.
- **Innovation initiatives:** Analyze innovation initiatives in the digital field.
- **Social, technological and economic factors:** Identify and understand the economic, social and technological factors that are at the heart of the digital revolution that is taking place in the economy.
- **Digital business models:** Apply concepts, tools and techniques for the design of digital business models.
- **Digital transformation strategies:** Explain and compare strategies for the digital transformation of a business.
- **Technological trends:** Get familiar with emerging trends in technologies of Information, understanding its impact on people and organizations.

PROGRAM

BLOCK 1 FUNDAMENTALS OF INFORMATION TECHNOLOGIES AND DIGITAL INNOVATION

SESSION 1

Introduction. Systems Maps.

- Presentation, objectives, methodology.
- Systems Map. What is it. How is built. Utilities. Examples.
- Main business applications: ERP, CRM, SCM, DW, ECM, etc.

DM: The ERP (Enterprise Resource Planning) (ICA16-269-M)

DM: CRM. Custom Relationship Management (S07-052-M) AI:

IT Is Everywhere. Why?

AI: What - and Who - Is Really Driving Digitization?

SESSION 2

Projects management.

- Technology implementation projects. Challenges and best practices. Change management. Technology, application and supplier selection strategies.

NT: What is a project (GS10-005)

NT: Importance of the methodology in project management (GS10-006)

DM: Carrera y Carrera (SI1-123-M)

SESSIONS 3 - 4

Security of the information.

- Impact of information security on business. Cyber risk mitigation measures. Risk appetite.
- How to design a business continuity plan. Disaster recovery. Processes of key business and associated resources. Contingency plans.

DM: Business Continuity Plan (SI2-106-M) Video:

Contingency and Business Continuity Plan

DM: Sownage: Cybersecurity and Business Continuity (SI1-139-M)

SESSION 5

IT Outsourcing.

- Management of outsourcing contracts for IT projects and services.
- Customer and supplier perspectives. Conflict management.

AI: Outsourcing: From Cost Management to Innovation and Business Value (CMR 406)

CP: Tegan ccc (HBS 610-S02)

CP: Hrad Technika (HBS 9-610-S01)

BLOCK 2 THE DIGITAL TRANSFORMATION OF BUSINESSES

SESSION 6

Strategy and technology.

- Technology as a source of competitive advantage.
- Alignment of Information Technology with business strategy.

AI: IT and the board of directors (HBRAL R0510F-E)

AI: Six IT Decisions You Shouldn't Leave to the IT Department (Harvard Deusto Business Review)

CP: Zara: IT for a changing fashion (HBS 605-S17)

SESSIONS 7 - 8

Presentations of individual works.

SESSION 9

Business Intelligence & Analytics.

- What does the Business Intelligence business expect?
- Descriptive, predictive and prescriptive analytics
- Competitive advantages based on the use of data
- What is (and what is not) Big

Data? DM: Business Intelligence

(SI1-131-M) DM: Big Data (SI2-107-M)

AI: Innovating with Analytics (SMR433)

SESSION 10

Adoption of Business Intelligence.

- Business Intelligence and Analytics as levers of transformation. Technological, managerial and cultural challenges in the adoption of BI in the company.

AI: Big Data: The Management Revolution (HBR R1210C)

CP: Administration with analytics at Procter & Gamble (HBS 614-S08)

BLOCK 3 DIGITAL INNOVATION AND TECHNOLOGY TRENDS

SESSION 11

Digital business models.

- Technological trends Economic and social factors

AI: Adapting to the Sharing Economy

AI: Digital Business Transformation. Where is your company on the Journey (IMD PFM187) AI: What every CEO should know about the cloud (HBRAL R1111J-E)

CP: The Powers That Be (Internet Edition): Google, Apple, Facebook, Amazon, and Microsoft (HBS 9-818-111)

SESSIONS 12 - 13

Innovation Management.

- The role of entrepreneurship and innovation in competitive strategy. How to maintain and strengthen competitive advantages based on innovation. How to incorporate innovation into the company. Collaboration with start-ups. Intrapreneurship.

AI: Design Thinking (HBRA Latin America R0809N-E)

AI: Discipline of Innovation (HBR R0208F)

CP: Apple Inc. in 2015 (HBS 716-S05)

SESSIONS 14 - 15

Group work presentations.

EVALUATION SYSTEM

Criterion	Percentage	Comments
Class participation	25%	
Individual work	35%	
Team work	40%	

- **Class participation.** Quality will be valued over quantity. An intervention will be considered of quality when it helps to stimulate the discussion in class, building on previous interventions, combining ideas and notions from other areas such as strategy, finance, operations, people

management or marketing. In short, contributing to a better understanding by the whole group of what was discussed at that time.

- **Individual work.** Systems map of a company to be previously agreed with the professor. It should graphically represent in a sequential and orderly way the main activities and data flows that make up the business processes, allowing to visualize the different information systems and applications that intervene. In the first session, precise instructions will be given on the scope and format of this individual work, including when it should be delivered.

- **Team work.** Prepare a digital transformation proposal for a company and sector to be previously agreed with the teacher. The group will pretend to be a multidisciplinary project team in which the different members will represent different areas of the company and at least one of them, Information Technology. The proposal must contain a detailed explanation of the scope of the proposal and its objectives. It will also include a budget and planning for its implementation, along with a business plan that justifies the return on the proposed investment and the expected benefits.

In addition to a report to be delivered in advance, the transformation project will be presented by the whole group for approximately twenty minutes to the rest of the class in the final double session.

BIBLIOGRAPHY

There is a wealth of literature on technology, digital transformation, and innovation. To delve into any of the topics covered in this subject that may be of interest, a list of information sources freely available on the internet is attached. Although the vast majority of the information is usually in English, there are also relevant publications in Spanish.

cio.com

cnet.com/e

[s](#)

[enriquedan](#)

[s.com](#)

fastcompany.com/techn

[ology](#)

forbes.com/technology

ft.com

hbr.org/topic/technolog

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sloanreview.mit.edu/topic/data-and-

[analytics](#)



sloanreview.mit.edu/topic/digital

techcrunch.com

wired.com

wsj.com/news/cio-

[journal zdnet.com](https://journal.zdnet.com)

The use of content aggregator applications from various sources is recommended, such as Flipboard, which in turn has more specific channels by industry (for example, "Technology in Higher Education") or by subject (for example "Digital Transformation & Disruption Trends "). It also allows you to add content from social network accounts such as LinkedIn or Twitter.