

Bachelor Degree in Business Administration and Management and Business Transformation

Course: Information technologies for business transformation

Subject: Computer science

Credits: 6 ECTS

Program: Bachelor

Modality: On-site

Year: First

Semester: First

Academic Year: 2026–2027

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2. Presentation

2.1 Description

The subject Information and communication technologies provides a set of both computer and organizational tools so that the student can perform with more efficiency and productivity in their immediate environment both individually and professionally.

2.2 Relevant professional applications

In any professional environment the relevant use of computer tools, together with their reasoned application in practical problems, has a very important relevance and is a differential value as a transversal competence to all disciplines.

3. Learning outcomes of the degree

- RAT1 - The graduate will be able to recognize the tasks of the different functional areas within a company or organization, taking into account previous theoretical learning about business structures.
- RAT4 - The student will describe the techniques of management in the development of business organizations by means of different written tests.
- RAT6 - The graduate will be able to understand the different data analysis techniques used to assess the feasibility of a business project.
- RAT9 - The student will be able to provide clear and precise explanations of any knowledge/information, both orally and in writing, in Catalan, Spanish and a third language, particularly English.
- RAT10 - The student will be able to apply digital technologies (at the right time) in his/her field of expertise.
- RAT12 - The graduate will be able to develop both traditional and digital marketing and promotional projects in a business environment.
- RAT18 - The student will be able to provide innovative, creative and entrepreneurial solutions in professional situations.
- RAT19 - The student will be able to evaluate the sustainability and social impact of the proposals presented, with ethical, environmental and professional responsibility.
- RAT20 - The student will be able to apply the gender perspective in the professional tasks.
- RAT22 - After completing the degree, the student will be able to design work processes to achieve organizational efficiency.
- RAT23 - The graduate will be able to actively propose a plan for the implementation and support of information and communication systems for the digital transformation of the organization, according to a project based on a real business case.

4. Learning outcomes of the subjects

- RAM1 - The student will be able to properly infer the general concepts of information and communication technologies, through their practical application in technological simulation environments.
- RAM,2 - The student will be able to correctly solve problems, worksheet tools exercises, databases, presentations, project management and other Internet personal productivity tools.
- RAM3 - The student will be able to clearly identify the ethical, cultural and social problems brought about by technological systems.
- RAM7 - The student will be able to correctly interpret management techniques and economic aspects related to the production of technological tools.
- RAM8 - The student will be able to properly use management techniques and technological tools for a digital transformation.

Contenidos

5. Contents

The subject Information technologies for business transformation provides a set of tools both computer and organization so that the student can perform with more efficiency and productivity in their immediate environment both individually and professional, apply it to make changes in the company, transform the business, digitize the business, and expand the business. In particular, it will address these issues:

- Spreadsheets.
- Personal productivity trends and utilities on the Internet.
- Project management tools for business transformation
- Presentation tools.
- Research tools for departments such as computing, finance, economics, marketing
- Introduction to databasesRelational data mode
- Administration and interpretation of databases for business transformation decision-making
- Design and development of database applications
- Creation of content
- Web application mechanisms and technologies
- Google G suite
- Application through examples and exercises of Corporate Social Responsibility to ensure a better sustainable community and continuity in awareness of its importance.

6. Metodology

Learning outcomes developed	Teaching methodology	Training activities
Knowledge	Master class	Teacher's presentations
	Instructional sessions	Student's presentations
	Tutoring	Meetings for the resolution of doubts
	Learning based on readings	Reading and analysis of documents
Skill	Learning based on projects	Problem solving
	Learning based on audio-visual	Audiovisual analysis
	Case-based learning	Search and processing of information. Problem solving
Competence	Project-based work	Reporting Submissions of reports or papers

7. Evaluation

Evaluation system	Weight
Continuous evaluation: exercises, problems, reporting, papers, case studies	40 %
Mid-term exam	20 %
Final exam	40 %

The regulations include a mandatory attendance requirement of 75%.

Regular attendance at in-person teaching activities is a fundamental academic requirement for the proper acquisition of the competencies and learning outcomes of the course. Accordingly, a minimum attendance rate of **75% of all scheduled sessions** is mandatory.

Failure to meet this minimum attendance requirement will result in the loss of the right to sit the final examination for the course. Consequently, the student will receive a failing grade, with no possibility of reassessment or second-chance opportunities, in accordance with the University's current academic regulations.

1. Absences are divided into two categories: **excused** and **unexcused**. Excused absences are those that can be supported by appropriate documentation. All other absences are considered unexcused.

2. Supporting documentation for an excused absence must be submitted to the teaching staff within a maximum period of **7 days**. The documentation must clearly include the student's personal details, as well as the date and time period during which the student was prevented from attending class.

Continuous assessment

The final grade for the subject is calculated based on the weighting of three evaluation blocks, divided into evaluable activities:

A. Midterm exam: 20%

B. Exercises, problems, preparation of reports, assignments, presentations: 40%

1. Four evaluable activities: 5% each

2. A group assignment or report: 10%

3. A group presentation: 10%

C. Final exam: 40%

These three blocks will only be weighted if the final exam grade is equal to or greater than 4.0. If the final exam grade is less than 4.0, the subject cannot be passed.

In the event that the subject is failed and, in turn, the final exam grade is less than 5.0, the student can recover the final exam with an additional test. If the weighted grade for the activities in section B is less than 5, this is also recoverable. With the result obtained, the final grade for the subject will be calculated according to the previous criteria.

Students who do not attend evaluative activities with a weight greater than 50% will receive an overall course grade of "Not presented."

Single Evaluation

The single evaluation consists of a single exam that is equivalent to 100% of the course grade. The exam, and therefore the subject, is passed with a grade of 5 out of 10 in this final test. In case of obtaining a grade lower than 5.0, the student has the right to a make-up exam.

To benefit from the single evaluation, it is necessary to send a written request to the coordination during the first 15 business days of the course.

8. Bibliography

8.1 Basic Bibliography

- Thach, N. N., Kreinovich, V., & Trung, N. D. (Eds.). (2021). Data Science for Financial Econometrics. Springer International Publishing.

8.2 Recommended Bibliography

- Propergol, Sergio (2019). Excel 2019: manual avanzado. Anaya Multimedia, 2019.