

30128 - IT Systems for Management

Syllabus Information

Academic year: 2023/24

Subject: 30128 - IT Systems for Management

Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia

Degree: 425 - Bachelor's Degree in Industrial Organisational Engineering

ECTS: 6.0

Year: 3

Semester: Second semester

Subject type: Compulsory

Module:

1. General information

This subject establishes a solid foundation for the understanding of Information Systems in organizations, becoming familiar with methodologies and technologies used in their management. Promoting the skills and attitudes to work and learn autonomously, integrate knowledge, manage information, develop their critical spirit so that they can analyze and solve the problems that arise, related to information management through computer applications.

These approaches and objectives are aligned with the Sustainable Development Goals (SDGs) of the 2030 Agenda of United Nations (<https://www.un.org/sustainabledevelopment/es/>), specifically, the learning activities planned in this subject will contribute to the achievement of target 4.4 of Goal 4, target 5.b of Goal 5 and target 8.2 of Goal 8.

2. Learning results

1. Identify the Information Systems of an organization/company as a key element for its day-to-day operation.
2. Identify Information Systems as a key element for growth, improvement of competitiveness, and creation of new business formulas and/or products.
3. Know the basic concepts that make up information systems (data vs. information, knowledge, communications, ...) and the technological environment that currently supports them.
4. Know the basic parameters and typical phases that are associated with the development and implementation of an Information System in the organization.
5. Know the usual problems linked to these processes (communication problems, interference in the normal development of the business, maintenance, etc.).
6. Learn about successful cases of the use of Information Systems and the improvements obtained. These success stories serve as a baseline example.

3. Syllabus

Theory:

- Introduction to Business Information Systems.
- Capture and representation of information. Modeling with UML. Data and information systems administration.
- Information systems for the relationship with the organization's environment.
- Basic concepts that make up information systems and the technological environment that currently supports them.
- Implementation and Maintenance of Information Systems.
- Successful cases of implementation and use of Information Systems.

Practical.

- Initial study and design of the implementation of Business Information Systems.
- Modeling and information management tools.

4. Academic activities

The following activities will be carried out with strong teacher/student interaction:

- Theoretical and practical classes: Activities given by the teacher, exposing the theoretical supports, highlighting the fundamental, structuring them in topics/sections and relating them to each other. Using computer tools of general use and, generally, in computer rooms.
- Group tutoring: Programmed learning follow-up activities in which the professor guides students in their autonomous learning tasks and supervises supervised work.

- Individual tutoring: These are carried out through personalized attention, either in person or online, with the objective of to resolve students' doubts.
- Preparation and performance of evaluation tests.

5. Assessment system

Continuous assessment

Mandatory activities:

- Written tests and active participation (30%). Individual. It will consist of the completion of one or more tests and active participation in the different activities proposed in the virtual classroom.
- Information System Implementation Project (70%). Individual or team. Development of an original project of implementation of IS in a company, together with its corresponding memory. Two deliveries are planned during the execution process, in order to carry out formative and continuous assessment. Both deliveries will be graded separately.

Global assessment.

Mandatory activities:

- Academic work (40%). Individual or team. Development of an original IS implementation project in a company, together with its corresponding report.
- Final open response written test (60%). Individual. It will consist of the timed completion

of a written test, of one or more questions, in which the students construct their answer. They may or may not be granted the right to consult supporting material. This test will include one or more questions on the academic work done in the previous item.

Both activities must be approved separately.