

30226 - Software Project

Syllabus Information

Academic year: 2023/24

Subject: 30226 - Software Project

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
326 - Escuela Universitaria Politécnica de Teruel

Degree: 439 - Bachelor's Degree in Informatics Engineering
443 - Bachelor's Degree in Informatics Engineering

ECTS: 6.0

Year: 3

Semester: Second semester

Subject type: Compulsory

Module:

1. General information

At the end of the subject the student will have carried out a complete software project, from the requirements determination phase to the delivery to the client, evaluating and taking technical decisions that will condition their work, and elaborating the documentation that accompanies it from the point of view of both the product and the process.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>) in such a way that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement:-

- Goal 9: Industry, innovation and infrastructure.

2. Learning results

The student, in order to pass this subject, must demonstrate the following results....

- Know how to design, develop, select and evaluate computer applications and systems, ensuring their reliability, security and quality, according to ethical principles and current legislation and regulations.
- Be able to plan, conceive, deploy and manage IT projects, services and systems in all areas, leading their implementation and continuous improvement and assessing their economic and social impact.
- Understand the importance of negotiation, effective work habits, leadership and communication skills in all software development environments.
- Learn how to prepare the technical specifications of a computer installation that complies with the standards and regulations in force.
- Know how to carry out the maintenance of computer systems, services and applications.
- Know the basic fundamentals of national, European and international IT rules and regulations.
- Appreciate the need for permanent and collaborative dialogue

3. Syllabus

The syllabus consists of two blocks:

1. Software Project Design. Architecture, documentation and automatic construction.

2. Software Project Management. Overview, configuration management, metrics and estimates, planning, risks, team, quality and environment.

4. Academic activities

At the School of Engineering and Architecture of Zaragoza:

- **Lectures and problems. 30 hours.**

Development of the contents of the subject and application of the contents of the theory both in small cases and in the software project of the subject.

- **Laboratory practices. 12 hours.**

- **Subject work. 90 hours.**

- **Study. 12 hours.**

The hours of subject work and study will be applied, fundamentally, to the software project to be developed.

- **Assessment tests. 6 hours.**

At the Polytechnic University School of Teruel:

- **Lectures and problems. 30 hours.**

Development of the contents of the subject and application of the contents of the theory both in small cases and in the software project of the subject.

- **Laboratory practices. 30 hours.**

- **Subject work. 40 hours.**

- **Individual study and work. 44 hours.**

- **Assessment tests. 6 hours.**

5. Assessment system

At the School of Engineering and Architecture of Zaragoza:

A test with two exercises:

1. **Completion and defense of practical work/projects in groups (80%):** During this activity, students will be asked to develop a work to be done as a group. The project will include the construction of a small software application in which they will have to deal with all the tasks of software engineering, with special attention to those related to the management and support of the different development activities.

The team of teachers will evaluate the management work developed on the basis of deliverables provided by the group and reflecting this work, and on each group's defense of their work.

2. **Written questions on concepts learned in theory and problems (20%)**

In order to pass the subject, the weighted sum of both exercises must be at least 5 out of 10.

At the Polytechnic University School of Teruel:

Completion and defense of a practical group work/project. At the beginning of the subject, students will be offered a work to be carried out in groups. This project will include the construction of a small software application in which they will have to deal with all the tasks of software engineering, with special attention to linked to the management and support of the different development activities. The teacher will evaluate the work developed by each student on the basis of deliverables provided by the group and reflecting their activity, and on the defense that each group makes of their work.