

Información del Plan Docente

Academic Year	2016/17
Academic center	110 - Escuela de Ingeniería y Arquitectura
Degree	439 - Bachelor's Degree in Informatics Engineering
ECTS	6.0
Course	4
Period	Half-yearly
Subject Type	Compulsory
Module	---

1.Basic info**1.1.Recommendations to take this course****1.2.Activities and key dates for the course****2.Initiation****2.1.Learning outcomes that define the subject****2.2.Introduction****3.Context and competences****3.1.Goals****3.2.Context and meaning of the subject in the degree****3.3.Competences****3.4.Importance of learning outcomes****4.Evaluation****5.Activities and resources****5.1.General methodological presentation****Face-to-face instruction is mainly based on:**

- Master lectures and problem solving sessions given by the teacher.
- Seminars given by experts.
- Laboratory practices at computer rooms.
- Tutor sessions at the teacher's office.
- Evaluation activities such as written tests, projects, oral presentations, etc.

Non face-to-face instruction includes:

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- Tutored works, such as preparation of seminars, problem solving, research reports, etc.
- Personal study of the theory of the course.
- Personal study of the practice of the course.

5.2.Learning activities

Master lectures

In these lectures, the professor will discuss the theoretical aspects of the course, use cases, how to complete the practices and works, and where to find additional information. The professor will encourage students to participate as much as possible.

Problem solving sessions

In these sessions, the concepts and techniques explained in master lectures will be put into practice by means of examples of application.

Laboratory practices

The work in the computer lab will help students to further put into practice the concepts and techniques of the course.

Seminars

If possible, external experts will be invited to give seminars. Both experts from the public and private sector will be considered.

Tutored works

Tutored works will give students the opportunity to further study specific themes particularly interesting for them.

5.3.Program

I. Distributed Information Systems in Web Environments

1. The Web. Standards. Accessing Web data
2. Semi-structured data based on XML and RDF

3. Open Linked Data. Big Data

4. The Social Web. The Semantic Web. The Ubiquitous Web
5. Uncertainty management in Distributed Information Systems

II. Distributed Information Systems as Distributed Systems

6. Wireless networks. Mobile computing
7. Mobile application development
8. Mobile data services. Mobile agents
9. P2P networks. Sensor networks
10. Mobile semantic services

5.4.Planning and scheduling

Sessions

Face-to-face instruction will be organized as follows:

- Master lectures: 2 hours per week
- Problem solving sessions: 1 hour per week.
- Laboratory practices: 5 sessions of 3 hours (approximately, one session every 2 weeks).

The scheduled of all the sessions and deadlines for the projects and works will be announced well in advance using the Moodle 2 platform.

Student work

This course corresponds to 6 ECTS credits. The full dedication of the student is estimated at 150 hours (60 hours of face-to-face instruction and 90 hours of personal work) distributed as follows:

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- 60 hours, approximately, of master lectures, problem solving and laboratory practices.
- 87 hours of personal work of students including realization of projects and works, study of notes and texts, problem solving, etc.
- A 3 hours final exam.

5.5. Bibliography and recommended resources