62227 - Technologies and models for developing distributed applications

Información del Plan Docente

Academic Year	2017/18
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	534 - Master's in IT Engineering
ECTS	6.0
Year	1
Semester	Second semester
Subject Type	Compulsory
Module	---

1.General information

1.1.Introduction

1.2.Recommendations to take this course

1.3.Context and importance of this course in the degree

1.4.Activities and key dates

2.Learning goals

2.1.Learning goals

2.2.Importance of learning goals

3.Aims of the course and competences

3.1.Aims of the course

3.2.Competences

4.Assessment (1st and 2nd call)

4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

5.Methodology, learning tasks, syllabus and resources

5.1.Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, problem-solving, expert talks, seminars, laboratory assignments, small group guidance and feedback, and assessment.

5.2.Learning tasks

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The course (150 hours) includes the following learning tasks:

- Classroom activities (40 hours). Lectures, examples, problems, laboratory assignments.
- Project (80 hours).
- Tutorials (5 hours).
- Autonomous work and study (20 hours).
- Assessment (5 hours).

5.3.Syllabus

The course will address the following topics:

1. Foundations of distributed Internet.
2. Technologies, frameworks and standards for the development of Internet apps.
3. Security, semantics and other horizontal issues.
4. Design of distributed Internet apps.
5. Integration of components by means of events and messages.
6. Basic concepts and principles for the design of apps in cluster, grid and cloud environments.
7. Resource management models (processing, storage, network...) for cluster, grid and cloud environments.

5.4.Course planning and calendar

The classroom sessions are distributed in three weekly hours along the course.

Important dates for project deadlines, exams and other activities will be announced on the Moodle website and the Center website.

5.5.Bibliography and recommended resources

During the course, specific bibliography will be suggested for each topic.