

30215 - Computer architecture and organisation 2

Información del Plan Docente

Academic Year	2017/18
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	2
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 student will learn the basic elements of a computer and how they relate to the computer performance, by means of case study (problem solving, lab sessions and assignments)

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5.2.Learning tasks

- Regular classes and lectures (2 h per week)
- Problem solving sessions (1 h per week)
- Lab sessions (1 h per week in average)
- Self assesment tasks, assignments and course projects (a bout 85 h)
- Assesment tasks (5 h)

5.3.Syllabus

Design of a complex digital system

- Introduction to performance analysis
- Processor organization: Monocycle and Multicycle non-pipelined machines. Exceptions and processor's modes. Pipelining.
- Memory system: memory types, principle of locality, memory hierarchy, cache memories and main memory organization.
- Buses and I/O devices

5.4.Course planning and calendar

The course's schedule abides by the academic calendar of the University of Zargoza and [EINA](#)

5.5.Bibliography and recommended resources