

62226 - Ubiquitous embedded systems

Syllabus Information

Academic Year: 2019/20

Subject: 62226 - Ubiquitous embedded systems

Faculty / School: 110 -

Degree: 534 - Master's in IT Engineering

ECTS: 6.0

Year: 1

Semester: Second semester

Subject Type: Compulsory

Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

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

4.Methodology, learning tasks, syllabus and resources

4.1.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, laboratory sessions, tutorials, assessment, assignments, study, autonomous work (exam preparation, library work, further reading, problem solving, etc.).

4.2.Learning tasks

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

- Classroom activities (50 hours). Seminars, problem solving, laboratory, visits, etc.
- Practice and research assignments (45 hours).
- Tutorials (5 hours).
- Autonomous work and study (45 hours).
- Assessment (5 hours). Exam and defense of the course project.

4.3.Syllabus

The course will address the following topics:

1. Introduction
2. Embedded Computing Components, programming, time sequential sampled, concurrent, cyclic, interruptions
3. IoT
4. Smartphones & Wearables
5. SEU & IoT Applications

4.4.Course planning and calendar

The learning organization of the classroom sessions are scheduled as follows:

- Lectures.
- Problem-solving and case studies.
- Lab assignments.

The proposed projects will be submitted at the end of the semester in the indicated dates.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the course website.

4.5.Bibliography and recommended resources