Analog Electronics Lab

Academic Year: (2019/2020)

Review date: 16/12/2019 21:27:33

Department assigned to the subject: Electronic Technology Department

Coordinating teacher: PEREZ GARCILOPEZ, ANTONIA ISABEL

Type: Electives ECTS Credits : 3.0

Year : 4 Semester :

OBJECTIVES

By the end of this content area, students will be able to have:

1. Coherent knowledge of their branch of engineering including some at the forefront of the branch in analog electronics

2. The ability to apply their knowledge and understanding of analog electronics to identify,

formulate and solve engineering problems using established methods

3. The ability to apply their knowledge and understanding to develop and realise designs to meet defined and specified requirements

4. An understanding of design methodologies, and an ability to use them

5. The ability to design and conduct appropriate experiments, interpret the data and draw conclusions

6. Workshop and laboratory skills

7. The ability to select and use appropriate equipment, tools and methods

8. The ability to combine theory and practice to solve problems of analog electronics

9. An understanding of applicable techniques and methods in analog electronics, and of their limitations

DESCRIPTION OF CONTENTS: PROGRAMME

Design methodology for analog electronic systems.

Analysis, design, simulation and implementation of an electronic system including analog component s like sensors, amplifiers, filters and oscillators.

Technical documentation elaboration and presentation.

LEARNING ACTIVITIES AND METHODOLOGY

The teaching methodology will include:

- Magisterial Classes, where the students will be presented with the basic knowledge they must acquire. Students will be supplied with lecture notes and key reference texts which will enable them to complete and acquire a more in depth knowledge of the subject.

- Problems Classes, these are aimed at the solving of exercises and examples within the context of real case studies.

These classes will be complimented with the resolution of practical exercises on behalf of the student.

- Laboratory Practical Sessions

- Group tutorials

ASSESSMENT SYSTEM

% end-of-term-examination/test:	60
% of continuous assessment (assigments, laboratory, practicals):	40

FINAL EXAM. Global assessment of knowledge, skills and capacities acquired throughout the course. CONTINUOUS EVALUATION. Assesses papers, projects, class presentations, debates, exercises, internships and workshops throughout the course.