

Academic Year/course: 2021/22

## 29846 - Electronic Design

### **Syllabus Information**

Academic Year: 2021/22

Subject: 29846 - Electronic Design

**Faculty / School:** 326 - Escuela Universitaria Politécnica de Teruel **Degree:** 444 - Bachelor's Degree in Electronic and Automatic Engineering

**ECTS**: 6.0 **Year**: 4

Semester: Second semester Subject Type: Optional

Module:

### 1. General information

# 2. Learning goals

# 3. Assessment (1st and 2nd call)

# 4. Methodology, learning tasks, syllabus and resources

### 4.1. Methodological overview

The process of teaching and learning designed for this subject is based on the following. It will involve three main levels: lectures, practical exercises and laboratory.

- In the lectures, the basic components of the electronic design will be introduced.
- In the sessions of practical exercises, problems and cases will be solved with an active student participation.
- Laboratory sessions will be conducted in small groups, where students will perform circuit simultion and electronic circuits assembly.

A final project to integrate the acquired knowledge will be proposed to be developed by students.

#### 4.2. Learning tasks

The course includes the following learning tasks:

**ON-SITE ACTIVITIES: 2.4 ECTS (60 hours)** 

1) Face-to-face sessions (T1): 30 hours. Lectures of theoretical and practical content.

2) Practical exercise lessons (T2): 15 hours.

Practical exercises related to the theoretical contents will be developed.

3) Laboratory sessions (T3): 15 hours.

**NOT IN PERSON ACTIVITIES: 3.6 ECTS (90 hours)** 

4) Study (T7): 82 hours.

Personal work and study of the student of the theoretical content, practical exercise Performance, preparation of the lab sessions and development of the final project.

## 4.3. Syllabus

The course will address the following topics:

- PCB technology.
- CAD tools for PCB design.
- Design in the presence of electromagnetic interferences.
- Introduction to the EMC regulations.

## 4.4. Course planning and calendar

Both theoretical and practical exercises classes and laboratory sessions are held according to the schedule set by the centre (available on the corresponding website).

Each teacher will inform of the particular tutoring hours.