

Course guide

220611 - 220611 - Emc and Power Quality

Last modified: 11/04/2025

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 710 - EEL - Department of Electronic Engineering.

Degree: MASTER'S DEGREE IN AUTOMATIC SYSTEMS AND INDUSTRIAL ELECTRONICS (Syllabus 2012). (Optional subject).

Academic year: 2025 **ECTS Credits:** 5.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: JAVIER GAGO BARRIO

Others: Juan Mon Gonzalez

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

3. Research and evaluation the energy efficiency of different equipment from domestic appliances till industrial processes.

Transversal:

2. ENTREPRENEURSHIP AND INNOVATION: Knowing about and understanding how businesses are run and the sciences that govern their activity. Having the ability to understand labor laws and how planning, industrial and marketing strategies, quality and profits relate to each other.

4. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

5. EFFECTIVE USE OF INFORMATION RESOURCES. Managing the acquisition, structure, analysis and display of information from the own field of specialization. Taking a critical stance with regard to the results obtained.

Basic:

1. Improve self-learning capacity

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

Type	Hours	Percentage
Hours small group	14,0	11.20
Hours large group	31,0	24.80
Self study	80,0	64.00

Total learning time: 125 h

CONTENTS

EMC practices

Description:

- 1- EMC introduction
- 2- Crosstalking
- 3- Conducted EMIs
- 4- Reflections

Full-or-part-time: 22h 30m

Theory classes: 22h 30m

EMC Project

Description:

EMC Project

Full-or-part-time: 22h 30m

Theory classes: 22h 30m

ACTIVITIES

(ENG) ACTIVITAT 1. CLASSES DE TEORIA

Full-or-part-time: 15h

Self study: 7h 30m

Theory classes: 7h 30m

(ENG) ACTIVITAT 2. CLASSES DE LABORATORI

Full-or-part-time: 30h

Self study: 15h

Laboratory classes: 15h

(ENG) ACTIVITAT 3. AVALUACIÓ PARCIAL

Full-or-part-time: 15h 30m

Self study: 14h

Theory classes: 1h 30m

(ENG) ACTIVITAT 5. TREBALL

Description:

This activity corresponds to the development of a job or project related to the thematic

Full-or-part-time: 45h

Self study: 22h 30m

Theory classes: 22h 30m



GRADING SYSTEM

$$Nf = 0,3 Nex + 0,3 NT + 0,4 NP$$

Nf : Final

Nex: Partial exam

NT: Project

NL: Laboratory practices

For those students who meet the requirements and submit to the reevaluation examination, the grade of the reevaluation exam will replace the grades of all the on-site written evaluation acts (tests, midterm and final exams) and the grades obtained during the course for lab practices, works, projects and presentations will be kept.

If the final grade after reevaluation is lower than 5.0, it will replace the initial one only if it is higher. If the final grade after reevaluation is greater or equal to 5.0, the final grade of the subject will be pass 5.0.

EXAMINATION RULES.
