

30036 - Electrical Technology

Información del Plan Docente

Academic Year	2018/19
Subject	30036 - Electrical Technology
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	436 - Bachelor's Degree in Industrial Engineering Technology
ECTS	6.0
Year	4
Semester	First semester
Subject Type	Optional
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 learning process that has been designed for this course is based on the following:

Classes of theory, problems and laboratory, with active participation of the student in all of them.

- Classes of theory and problems: will be presented the bconcepts of the contents of the subject, with practical examples.
- Practices of laboratory: The student will perform calculations by computer with advanced software for design of electrical installations, will mount protection devices, will perform the installation of fluorescent tubes and will

program PLCs.

4.2.Learning tasks

4.3.Syllabus

Topics

1. Introduction
2. Electrical cables
3. Overcurrent protection devices
4. Protection against indirect contacts
5. Electric motors
6. Wired logic
7. Reactive power compensation
8. Transformation centres
9. Works on electrical installations
10. Electricity supply contract
11. Fundamentals of lighting

Laboratory practices

1. Calculation of electrical installations (3 h)
2. Protection against indirect contacts (3 h)
3. Control of electrical systems I (3 h)
4. Control of electrical systems II (3 h)
5. Network analyzers. Measurement of electrical parameters (3 h)

4.4.Course planning and calendar

4.5.Bibliography and recommended resources