

30053 - Electric Mobility

Syllabus Information

Academic Year: 2020/21

Subject: 30053 - Electric Mobility

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 methodology will be based on theoretical and practical classes.

Master classes are complemented with simulation practice classes, using computer programs for electric modeling and electromagnetic fields modelling.

Students do several jobs throughout the course to deepen their knowledge of various topics

4.2.Learning tasks

The program offered to the student to help him achieve the expected results includes the following activities:

Master classes (45 classroom hours)

Sessions of reasoned explanation of contents. Student participation will be encouraged through short questions and discussions.

Problems and use cases will also be developed with the participation of the students, coordinated at all times with the theoretical contents. The student is encouraged to work the problems beforehand.

In the case of not being able to teach in the classrooms, it will be done online.

Students expose some of their work to the rest of their classmates, to improve their expression skills and discuss the ideas presented. In the case of not being able to expose their work in the classrooms, it will be done online.

Laboratory (15 hours).

Simulation practices will be carried out in which the student will design an electric vehicle model checking its operation in different circumstances.

Various electric vehicle charging equipment will be shown: conductive and inductive that will be used by students.

In the case of not being able to teach in the laboratory all the practice classes will be made by computer online.

Supervised works

Exercises and use cases to be developed on their own will be proposed periodically to the student. This section also includes the preparation of laboratory practices and additional activities.

Evaluation

The evaluation is part of the learning process with which the student verifies the degree of understanding and assimilation that has been achieved, for this the works are evaluated, part of which are exposed in public by the students, in addition to a written exam of 2 Hours of duration.

Tutorials

Personalized attention to the student, identification of learning problems, orientation in the subject, attention to exercises and work.

The tutoring will take place in the teacher's office, if this is not possible it will be done online

4.3.Syllabus

4.4.Course planning and calendar

4.5.Bibliography and recommended resources

Link:

http://biblos.unizar.es/br/br_citas.php?codigo=30053&year=2019