

COURSE NAME

Name: **ELECTRICAL TECHNOLOGY**

Code: 101137

Curriculum: **DEGREE IN CIVIL ENGINEERING**

Year: 1

Subject: ELECTRICAL TECHNOLOGY

Nature: BASIC Duration: FIRST SEMESTER

ECTS Credits: 6

Classroom hours: 60

Face-to-face classroom percentage: 40%

Non-contact hours: 90

FACULTY DETAILS

Name: CANTIZANI OLIVA, JUAN (Coordinator)

Department: ELECTRICAL AND AUTOMATION ENGINEERING

Area: Electrical Engineering

Location of the office: EPS Belmez. Old building. (3st Floor)

E-Mail: p02caolj@uco.es

Phone number: 957218336

SKILLS

- CB1 Have and understand specific knowledge of the study area of the Degree that gives skills for the exercise of the profession of Technical Civil Engineering.
- CB2 Have and understand updated and cutting-edge knowledge related to the field of study of the degree of Technical Civil Engineering.
- CB3 Be able to apply the knowledge acquired to their work or vocation in a professional manner. Prepare and defend arguments in the relevant knowledge area.
- CB4 Solve problems within the study area of Civil Engineering.
- CB6 Disclose information, ideas, problems and solutions to both specialised and non-specialised public.
- CB7 Possess the learning skills necessary to undertake studies with a high degree of autonomy
- CU2 Know and refine the user level of ITs.
- CEC10 Fundamental knowledge of the electrical system: power generation, transmission, delivery and distribution grid, as well as types of lines and conductors. Knowledge of the regulations on low and high voltage.

OBJECTIVES

Know the electrical power system: power generation, transmission network, applications and distribution, as well as types of lines and conductors. Knowledge and application of the regulations in electrical installations.

CONTENTS:

1. Theoretical contents

1. ELECTRICAL INSTALLATIONS.
2. PROTECTING INSTALLATIONS.
3. TRANSPORTATION, DELIVERY AND DISTRIBUTION GRID.

1. Practical contents.

Exercise nº 0: Group tutorial - Consolidation of preliminary concepts.

Exercise nº 1: Measuring devices (PC)

Exercise nº 2: Single-phase problems

Exercise nº 3: Work with electric current. Safety and Regulations.

Exercise nº 4: Single-phase Circuits (Laboratory)

Exercise nº 5: Three-phase Problems

Exercise nº 6: PC classroom

Exercise nº 7: Grounding measurement. (Laboratory)

Exercise nº 8: Electrical Installations I. (PC)

Exercise nº 9: Electrical Installations. II (PC)

Exercise nº 10: Classroom PC

Exercise nº 11: EXERCISE EVALUATION (PC)