

Academic Year: (2023 / 2024)

Review date: 11-04-2023

Department assigned to the subject: Electrical Engineering Department

Coordinating teacher: ROBLES MUÑOZ, GUILLERMO

Type: Compulsory ECTS Credits : 3.0

Year : 3 Semester : 1

DESCRIPTION OF CONTENTS: PROGRAMME

1. Introduction to Electrical Machines.
 - a. General features
 - b. Machine classification
 - c. Electrical machines applied to robotics
- 2 Servos machines.
 - a. Physical constitution
 - b. Drivers
 - c. Machine control
 - d. Applications
3. Stepper motors
 - a. Physical constitution
 - b. Drivers
 - c. Stepper motor control
 - d. Applications
4. Laboratory practices
 - a. Control of a servo
 - b. Control of a stepper motor

LEARNING ACTIVITIES AND METHODOLOGY**THEORETICAL PRACTICAL CLASSES.**

Knowledge and concepts students must acquire. Receive course notes and will have basic reference texts. Students partake in exercises to resolve practical problems.

TUTORING SESSIONS.

Individualized attendance (individual tutoring) or in-group (group tutoring) for students with a teacher. Subjects with 6 credits have 4 hours of tutoring/ 100% on- site attendance.

STUDENT INDIVIDUAL WORK OR GROUP WORK.

Subjects with 6 credits have 98 hours/0% on-site.

WORKSHOPS AND LABORATORY SESSIONS.

Subjects with 3 credits have 4 hours with 100% on-site instruction. Subjects with 6 credits have 8 hours/100% on-site instruction.

ASSESSMENT SYSTEM**FINAL EXAM.**

Global assessment of knowledge, skills and capacities acquired throughout the course. The percentage of the evaluation varies for each subject between 60% and 0%.

CONTINUOUS EVALUATION.

Assesses papers, projects, class presentations, debates, exercises, internships and workshops throughout the course. The percentage of the evaluation varies for each subject between 40% and 100% of the final grade.

% end-of-term-examination:	60
% of continuous assessment (assignments, laboratory, practicals...):	40

