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Industrial Automation II

Academic Year: (2022 / 2023) Review date: 15-06-2022

Department assigned to the subject: Systems Engineering and Automation Department

Coordinating teacher: OÑA SIMBAÑA, EDWIN DANIEL

Type: Electives ECTS Credits: 6.0

Year: 4 Semester:

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Automatización Industrial I

OBJECTIVES

- Extend the knowledge on automation of industrial systems.
- Integration of the different equipments that are included in the automated industrial system.
- Capacity of collaborative team work

DESCRIPTION OF CONTENTS: PROGRAMME

This course has a practical character. The students automatize a real flexible manufacturing system, that includes:

- Storage and transport automated systems
- CNC machine tools
- Industrial robots
- Test systems
- Monitoring and control systems

To do that they must:

- Program the controllers
- Program the communication systems
- Coordinate the cells of the flexible manufacturing system
- Design and program a supervision system and a human-machine interface

LEARNING ACTIVITIES AND METHODOLOGY

- Practical work in the workshop (6 credits ECTS)

ASSESSMENT SYSTEM

% end-of-term-examination:

% of continuous assessment (assigments, laboratory, practicals...):

Continuous assessment of the work in the workshop Assessment of the systems developed by the student