# uc3m Universidad Carlos III de Madrid

## Industrial Automation II

Academic Year: (2019 / 2020) Review date: 14-05-2020

Department assigned to the subject: Systems Engineering and Automation Department

Coordinating teacher: CASTRO GONZALEZ, ALVARO

Type: Electives ECTS Credits: 6.0

Year: Semester: 2

## 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

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

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

% end-of-term-examination: 0

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