Intelligent autonomous robots

Academic Year: (2019 / 2020)   **Review date: 19-09-2016**

Department assigned to the subject: Systems Engineering and Automation Department

Coordinating teacher: SALICHS SANCHEZ-CABALLERO, MIGUEL

Type: Compulsory ECTS Credits : 6.0

Year : 1 Semester : 1

OBJECTIVES

- Knowledge of the state of the art of intelligent autonomous robotics
- Knowledge of the bases of intelligent autonomous robotics

DESCRIPTION OF CONTENTS: PROGRAMME

Introduction to robotics
Autonomy
Intelligence
Control architectures of robots
Introduction to robot learning
Introduction to robot perception
Introduction to decision making
Introduction to human-robot interaction
Roboethics

LEARNING ACTIVITIES AND METHODOLOGY

Theoretical and experimental lectures, presentations of the students, individual tutorials and personal work of the student. The participation of the students will be promoted in all lectures.

ASSESSMENT SYSTEM

Final exam, individual work and participation in lectures

% end-of-term-examination:	50
% of continuous assessment (assigments, laboratory, practicals…):	50

BASIC BIBLIOGRAPHY

- George A. Bekey Autonomous Robots: From Biological Inspiration to Implementation and Control, MIT Press, 2005