

Welcome to the UJI Autonomous Mobile Robots Online Course

In this course you are going to explore and learn with a simulator of the Pioneer P3-DX mobile robot (<http://www.mobilerobots.com/ResearchRobots/PioneerP3DX.aspx>).



During the first week, you will learn how a mobile robot moves, and how to program basic functions for sending commands to the motors, and calculating the distance travelled by the robot.

Week 1

- Hello World! (Hello%20World.ipynb)
- Moving the Robot (Moving%20the%20Robot.ipynb)
- Motion Functions (Motion%20Functions.ipynb)
- Encoders (Encoders.ipynb)
- Angles and Distances (Angles%20and%20Distances.ipynb)
- Exercises:
 1. Move the robot forward for a given distance (exercises/Distance.ipynb)
 2. Turn the robot right for a given angle (exercises/Angle.ipynb)
 3. Square Test (exercises/Square.ipynb)
 4. Robot Speed (exercises/Robot%20Speed.ipynb)

Try-a-Bot: an open source guide for robot programming

Developed by:



<http://robinlab.uji.es>

Sponsored by:



<http://www.ieee-ras.org>



<http://www.cyberbotics.com>



<http://www.theconstructsim.com>

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