ENB339 Introduction to Robotics

ENB339 introduces students to the exciting world of robotics. In 2013 it is being taught in second semester by Dr Michael Milford, Dr Ruth Schulz and Professor Peter Corke.

- Learn
- Requirements
- Support
- Prac Footage from 2012
- Photos from ENB339 in 2012
- Prac Footage from 2011
- Photos from ENB339 in 2011

Learn

- Robot construction, build a robot using Lego and the NXT controller brick
- Fundamentals of robotics, how to control the end point of a simple robot arm and make it follow a path
- Computer vision, how to interpret images to figure the size, shape and color of objects in the scene
- Connect computer vision to robotics, make your robot move to objects of specific size, shape and color.

Requirements

- The unit runs in semester 2 and is open to engineering, computer science and maths students as an elective.
- Some programming skills are required. The course requires MATLAB but experience in Java, C/C++ or Python would be fine.
- The unit outline from the 2011 version of the subject is available [here](#). Please note that this will change a little for 2012 as implement some improvements.
- The textbook is Robotics, Vision & Control

Support

We have worked hard to provide as much support for students as possible in this unit, especially considering the sometimes diverse academic backgrounds of international students. We provide the following support:

- Extensive custom-made theoretical video lectures (specifically made for an online audience, not just recordings of normal lectures)
  - Robot arm math and theory
  - Robot vision
- Extensive practical assistance videos, giving basic fundamentals of how to build and design robots and how to program them

Prac Footage from 2012

Video footage and photos from the Introduction to Robotics ENB339 Prac Exam 1. Music is from: "Moonlight Hall by Kevin MacLeod (incomptech.com) Licensed under Creative Commons "Attribution 3.0" [http://creativecommons.org/licenses/by/3.0/](http://creativecommons.org/licenses/by/3.0/)

Photos from ENB339 in 2012
Prac Footage from 2011

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Photos from ENB339 in 2011