

For those using the NXT, there is a superb set of curriculum materials from Carnegie Mellon University

[NXT Video Tutorials 2.0](#) available on DVD or free to access online. BJPCE Limited can also run accelerated CPD to get you started with this fantastic free resource.

Some of the highlights are picked out in the links below - why not take a look.

Line Following

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/behaviors/linefollowing/linefollowing.html>

(section 5,6 = basics, section 9 for types of line)

http://www.inpharmix.com/jps/PID_Controller_For_Lego_Mindstorms_Robots.html

For PID controller (Start with proportional and take care with light sensor distance/readings)

My Blocks

NXT Help > Contents and Index > Custom Blocks > My Blocks

<http://www.nxtprograms.com/help/MyBlocks/tutorial.html>

Example: constant (50 cm), maths x 20.5 as input to move degrees. Maths and move become a "forward cm" my block.

Various

<http://education.lego.com/downloads/>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/challenges/additional/treasure1.pdf>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/challenges/additional/dizzy.pdf>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/challenges/additional/parallelparking.pdf>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/challenges/additional/lanechange2.pdf>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/challenges/additional/nxtwashere.pdf>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/behaviors/linefollowing/roboslalom.pdf>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/advanced/variables/variables.html>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/advanced/calculations/calculations.html>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/advanced/values/values.html> - needs real time sound speed first

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/advanced/logic/logic.html>

<http://learn.cs2n.org/solt/lessons/nvt2.0/content/advanced/pipeline/pipeline.pdf>

