

First Lego Assignment

Lego Robotics Tutorial

Lego robotics combines drag-- - and-- - drop programming (like Scratch) and a fairly advanced processor and sensors (like Arduino) with motors that can make things move.

Like much of engineering it can seem daunting at first, but these instructions will help you learn quickly. Install the software on your computer (links on the web site). Find tutorials on the WWW (or use the ones linked on web site) to build a functioning robot that you understand how to make it move and get information from sensors on.

Review the information on the Mindstorms NXT 2.0 software help section. Start the software, and click on the Help/Contents & Index tab at the top. Scroll down the long list of topics as the left. Pay special attention to the following sections:

1. General topics.
2. Common blocs – loop block, switch block.
3. Data Blocks – compare block, variable block, random block.

Once you mastered the introductory materials you need to accomplish 3 out of the 10 robot challenges on the class' web site (using integrated sensors for all) before you can move on to your final project: building an AUV/ROV to sense in a fluid environment.