

Amusement Park Ride - NXT

Suggested Time

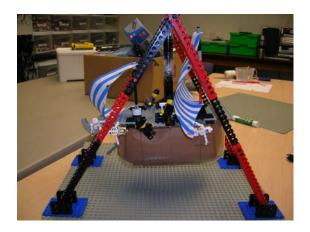
60 minutes

Age

8 - 18

Challenge

In this activity, design and construct an amusement park ride.



Example Amusement Park Ride. "Pirate Ship" designed to swing forward and backwards when motored.

Topics

Building & Programming

Subjects

Engineering & Technology

Programming Themes

Motor Forward, Motor Backward, Wait for Touch

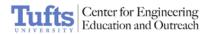
Related Math & Science Concepts

Forces

Structures

Materials

- NXT
- Assortment of LEGO pieces and Sensors



Building Instructions

1. Design an amusement park ride which imitates a real amusement park ride.

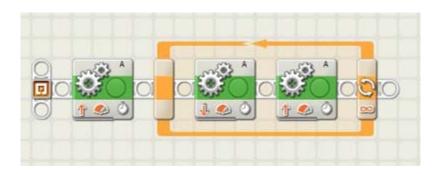


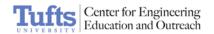
Programming Instructions

- 1. Choose whether to use ROBOLAB or the LEGO NXT-G software to program.
- 2. Here is an example ROBOLAB INVENTOR 4 program:



3. Here is an example LEGO NXT Software program:





Building and Programming References

- Building With Bricks
- Building With Plates
- Building With Beams
- Axle Uses
- Connector Pegs and Bushings
- The NXT
- NXT Motors and Wires
- NXT Sensors
- Gears