

Building Robots

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Summer Camp Resources 2023

2-day camp, day 1

Ben Lipper

Flex

Stretch

Allie

Linq

Level 1 building & design

- Pick a design from the list

Bot for the 2018-19 VEX IQ challenge game, Level.

- Build

Hero Bot for the 2017-18 VEX IQ challenge game, Ringmaster.

Fun robotic alligator and code her to walk with motorized legs.

Robotic forklift that can be coded to scoop, lift, and carry objects.

[Build instructions >](#)

[Build instructions >](#)

[Build instructions >](#)

[Build instructions >](#)

- Modify & improve

Slick

Ike

Armbot IQ

V-Rex



Pick a robot, any robot...

Linq



Robotic forklift that can be coded to scoop, lift, and carry objects.

[Build instructions >](#)

Stretch



Hero Bot for the 2017-18 VEX IQ challenge game, Ringmaster.

[Build instructions >](#)

Byte



Hero Bot for the 2023-24 VEX IQ Robotics Competition, Full Volume.

[PDF Build Instructions >](#)

Clawbot



An addition to the BaseBot build that includes a robotic arm and claw attachment.

[Build instructions >](#)

VIEW MORE

A person is shown from a high angle, focused on building a LEGO Technic robot on a grey table. The robot is partially assembled, featuring a grey motor, blue gears, and black wheels. The person is wearing a grey t-shirt with a graphic that includes the word 'GENIUS'. In the background, there are various LEGO Technic parts and a white storage bin. The scene is brightly lit, and the overall atmosphere is one of concentration and hands-on learning.

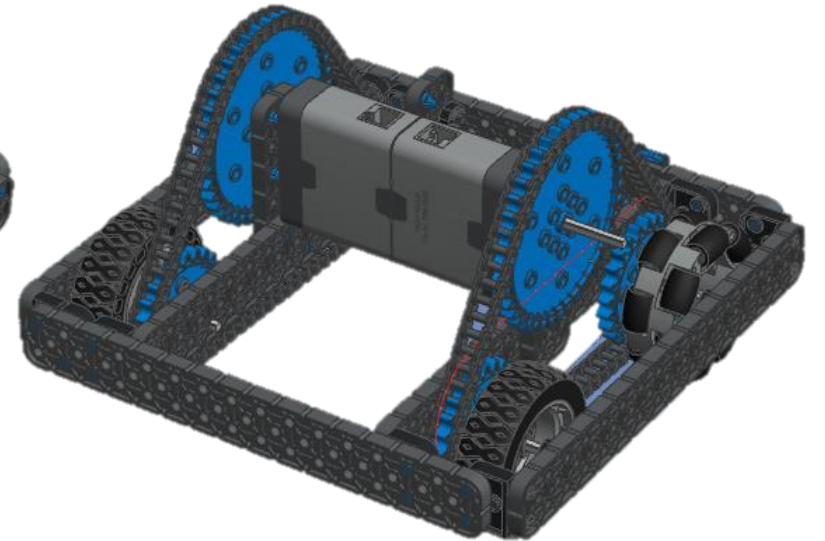
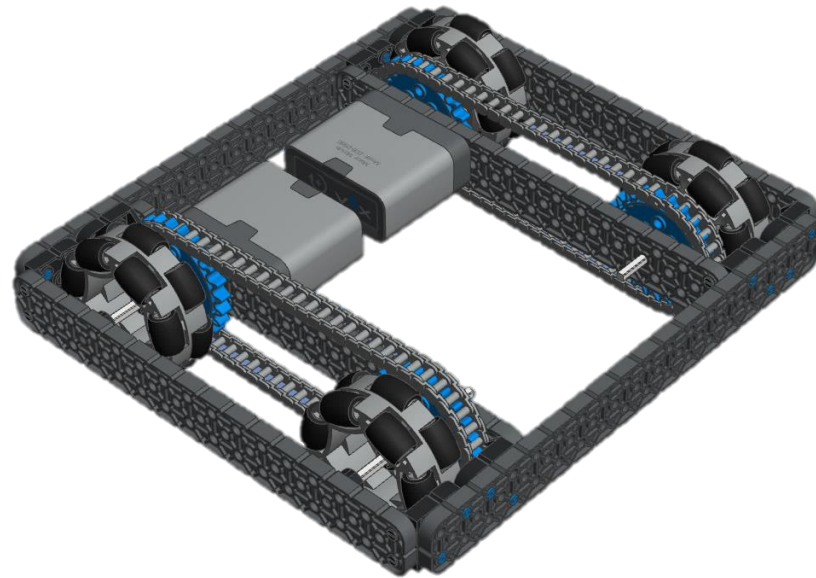
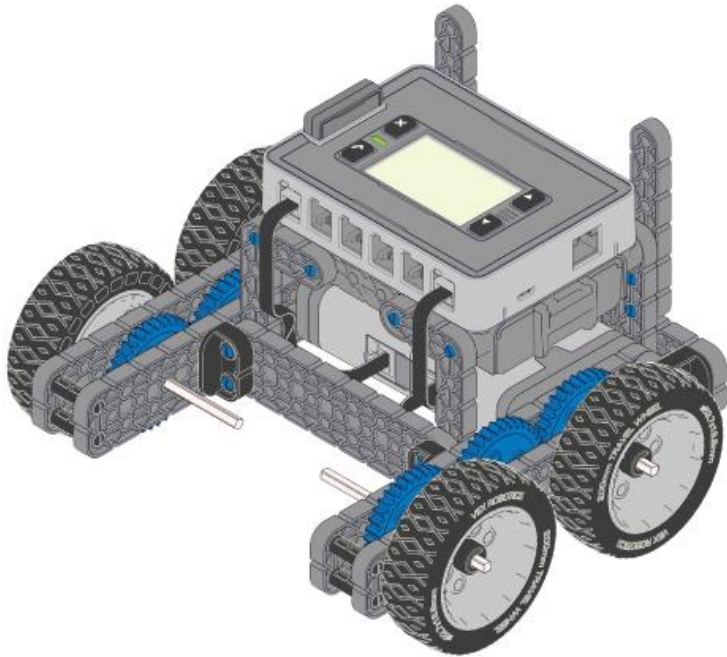
Building at Level 2

Using basic mechanisms
Putting it together yourself

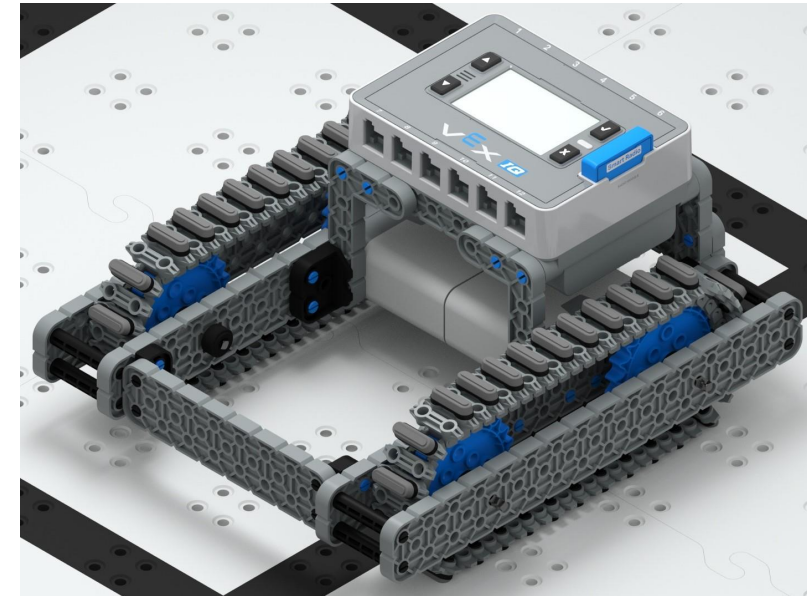
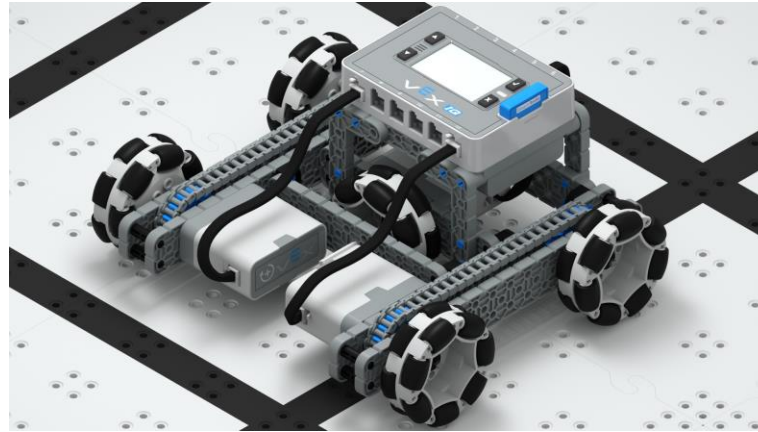


Drivetrains

Different robot models



Different base models – BE CAREFUL!

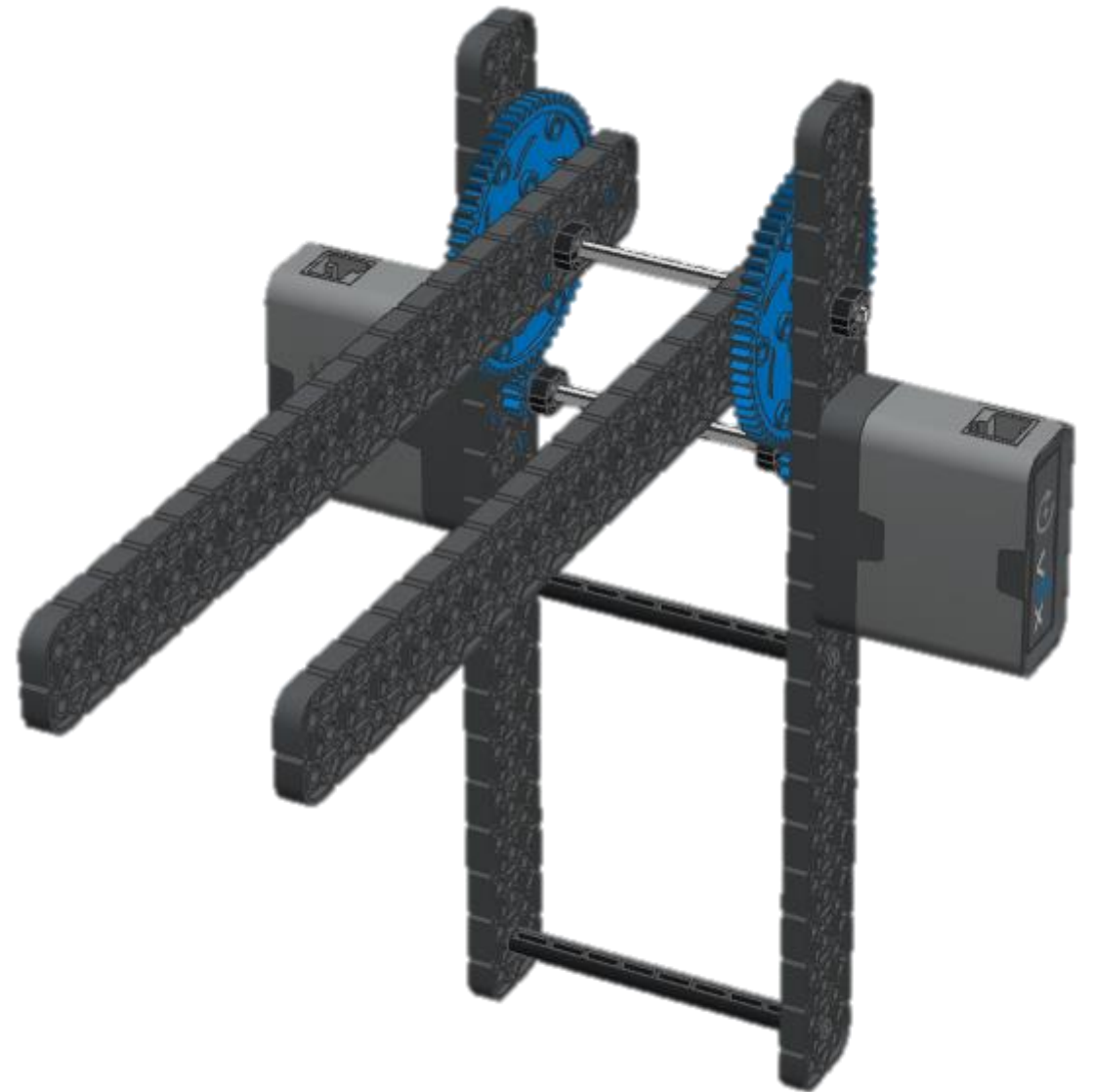


A 3D rendered robot with two arms is positioned on a white floor with a black grid pattern. The robot has a blue and black frame. It has two arms, one on the left and one on the right, both with blue and black components. The robot is surrounded by several purple and green blocks. A red cone is visible in the background. The text "Arms" is overlaid on the image in a large, black, sans-serif font. Below it, the text "2 main kinds" is overlaid in a smaller, black, sans-serif font.

Arms

2 main kinds

Single-jointed arm - Geared



4-bar arm

