

Introduction to

VEX IQ

Presenter

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What is VEX IQ?



VEX IQ is a robotics platform designed for elementary and middle school students. Students as young as 8 years old can jump right in and snap robots together using the VEX IQ intuitive, tool-less platform. Educators can utilize the free VEX IQ Curriculum and a variety of programming tools.



The Challenge: Next Level



The Challenge: Next Level

3 Ways to Play

1) TEAMWORK challenge

Two Teams work TOGETHER to score as many points as possible in 60 secs.
Both teams get the same score.

2) Robot SKILLS challenge

1) Driver Skills Challenge

One Team has 60 secs to score as many points by manually driving the robots.

2) Programming Skills Challenge

One Team has 60 secs to score as many points by programming the robots
(autonomously)

The robot skills challenge score is a combination of Both scores (Driver skills + Programming skills)

The Challenge: Next Level



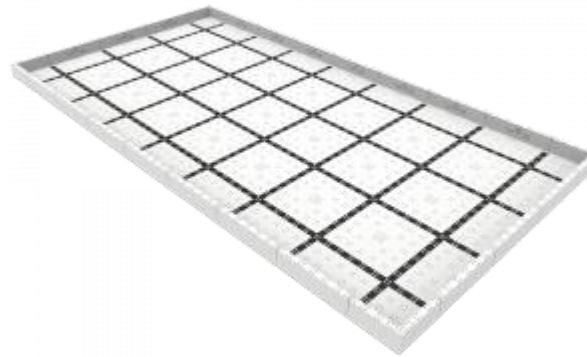
The Challenge: Next Level

What do you need?



Super Kit \$429.99

- Over 850 Structural & Motion Components
- **4 Smart Motors, 7 Sensors, Robot Brain, Controller & Batteries Included**
- Storage Bin & Tray included for organized storage of all parts



Full Field \$259.98 **OPTIONAL**

- Used each year
- Snaps together
- 8' x 4'



Next Level Field Element kit \$129.99 **OPTIONAL**

- All the field elements & game objects to build a complete VEX IQ Challenge Next Level field

Programming

Programming Software

Choose from **3 programming software solutions**

Graphical drag-and-drop programming interface for beginner to intermediate students

- RobotC (Free)
- EasyC
- Modkit (Free)

NEW! SnapCAD (FREE)

Community for learning design and creation of robots in a virtual environment



Curriculum Resources & Tools

VEX has developed the **VEX IQ Curriculum** as a companion to the VEX IQ platform for elementary and middle school students.

<http://www.vexrobotics.com/vexiq/education/iq-curriculum>

The **curriculum offers twelve flexible units of instruction** that can be used in sequence, in chunks, or as stand alone lessons. VEX has also developed a **new curriculum for camps and after school programs**

- Completely FREE
- Aimed at grades 2-8
- Project-based STEM units will instill proper engineering practices from an early age
- Create fun and excitement
- It will excite and inspire your students
- Handbook for after school programs and camps
- **VEX IQ Classroom Teacher's Guide for Grades 4–6 (VistaTeach) \$249.99**



Curriculum Resources & Tools

Lessons

If this is your first time, start with Unit A!

A It's Your Future

B Let's Get Started

C Your First Robot

D Simple Machines & Motion

E Chain Reaction Challenge

F Key Concepts

G Mechanisms

H Highrise Challenge

I Smart Machines

J Chain Reaction Programming Challenge

K Smarter Machines

L Highrise Programming Challenge

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Curriculum Resources & Tools

Built Using a Super Kit



Flex

(PDF, 27.9 MB)



Stretch Build Instructions

Stretch

(PDF, 39.8 MB)



Allie

(PDF, 28.9 MB)



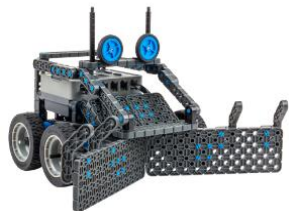
Ike

(PDF, 35.0 MB)



Linq

(PDF, 26.7 MB)



Slick

(PDF, 28.9 MB)



Clawbot IQ

(PDF, 60.5 MB)



Armbot IQ

(PDF, 42.8 MB)



V-Rex

(PDF, 39.4 MB)

Lets get started

How we can help:

- **Teacher PD**
One day interactive training session where teachers will build, drive and program a VEX robot.
- **Teacher & Student PD**
One day interactive training session where students will build, drive and program a VEX robot
- **School Board Scrimmage**
One day event where your teams can compete and learn to better prepare for the Skills Ontario Event – Next Level
- **Skills Ontario Qualifier event**
We can assist with your school district skills event.

Questions



Q & A

Thank You.



Thank you for time...

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