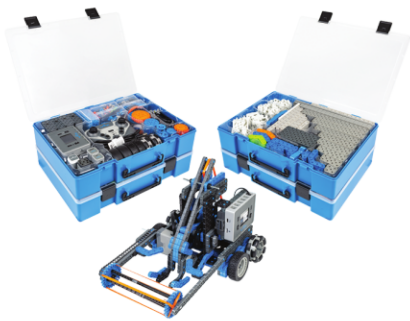# VEX IQ

Ages 11+

Applied STEM Learning for Ages 11+

The VEX IQ Education Kits and Classroom Bundles contain all the STEM hardware needed while educators get professional development, curriculum, and support. The VEX IQ Ecosystem promotes high-quality STEM education that is essential, relevant, and continual.
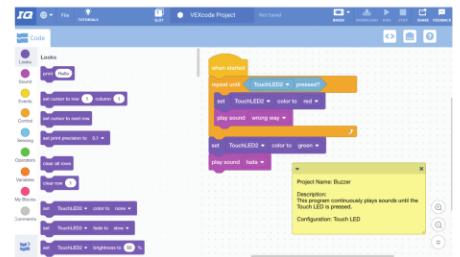
Organised Storage

VEX IQ kits come packaged in storage bins where every part has its own dedicated location. Visual labels inside each bin keep everything organised and easily accessible.
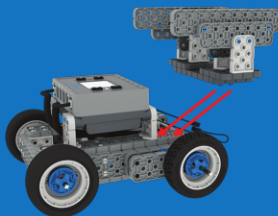
Complete STEM Solution

STEM Labs make teaching integrated STEM easier than ever before by engaging students with project-based learning whilst utilising the motivational effects of educational robotics.

Coding for Everyone

VEXcode IQ brings Robotics and Computer Science to life for students at all skill levels. Choose between three different coding languages: Block- based, Python, and C++.
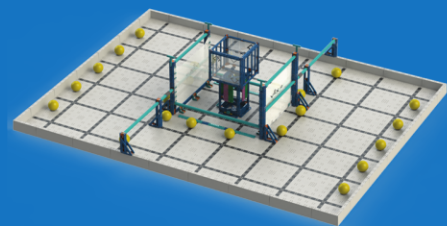
Free STEM Labs and Activities

VEX IQ STEM Labs function as "plugin" lessons that can fit into your existing curriculum. Multiple labs can be utilised in sequential order to create a unique, extended learning experience. STEM Labs promote collaboration and exploratory learning and contain everything teachers need to deliver rich STEM lessons.

Students enjoy hands-on-learning activities that allow them to apply technology, science, maths and engineering skills as they enjoy a 21st-century learning experience.

STEM Labs have something to offer for everyone.

Mapped to **National Curriculum** and **Scottish Benchmarks**

VEX IQ Competition

In the VEX IQ Competition teams of students are tasked with designing, building and coding a robot to play with other teams in a game-based engineering competition. Classroom STEM concepts are put to the test as students learn lifelong skills in teamwork, leadership, communications, and more.

VEX Robotics hosts the world's largest robotics competition for students all over the world to compete against one another using a robot of their own design. Teams can compete regionally, nationally and internationally at both in-person and remote events.

Find out more at **roboticseducation.org/vex-iq**

VEX IQ Classroom Bundles

The driving concept behind 21st century classroom design is flexibility. VEX IQ Kits, storage, fields, and game objects work together to make the teacher's job easier.

Classroom Bundles are the perfect solution for individual STEM classrooms. Bundles come in three sizes and include robot kits, extra parts, classroom charging, game field and game elements so you can bring the excitement of competitive robotics to your classroom.
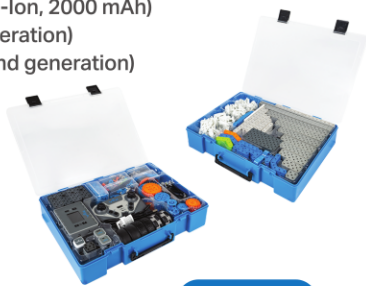
VEX IQ Education Kit

The IQ Education Kit makes STEM manageable for teachers and fun for students! Every part in the kit has its own dedicated location with labels packaged in two storage bins

Includes:

- (1) Robot Brain (2nd Generation)
- (1) IQ Robot Battery (Li-Ion, 2000 mAh)
- (1) Controller (2nd generation)
- (1) Distance Sensor (2nd generation)
- (1) Optical Sensor
- (4) Smart Motor
- (1) Touch LED
- (1) Bumper Sensor
- (9) Smart Cables
- (1) Pin Tool
- (1) USB-C Cable
- (2) Storage Cases
- (5) Storage Jewel Cases
- (1036) Plastic Construction Parts

£349.99

Classroom Bundle Contents

	Small Classroom	Classroom	Large Classroom
Number of Students	10	20	30
VEX IQ Education Kits (2nd gen)	5	10	15
STEM Games Field Tiles	12	24	36
STEM Games Field Walls	16	32	48
STEM Games Objects	18	36	54
Parts Posters	1	2	3
Extra Pin Tools	5	10	15
Classroom Charger (5 USB-C ports)	1	2	3
Spare Parts with Storage	1	2	3
	£1,949.99	**£3,899.98**	**£5,849.97**

All VEX IQ Classroom Bundles are delivered free of charge to UK mainland addresses.

Simple. Flexible. Powerful.

Brain
Connects your entire robot together and includes a colour screen for quick and easy control

Battery
Uses Lithium-ion technology to provide all-day classroom usage in most situations, and includes a button for quick battery charge indication

Controller
Enables wireless robot control and wireless code download

Smart Motors
Make your robots come to life with powerful and precise movement

Bumper Switch
Allows the robot to feel when it hits a wall or another robot and can be used as a limit switch

Touch LED
Provides human touch input to the robot and colour output to human eyes

Optical Sensor
Lets the robot see light, colour and gestures, even in darker rooms

Distance Sensor
Uses a safe laser to accurately detect distances without interference

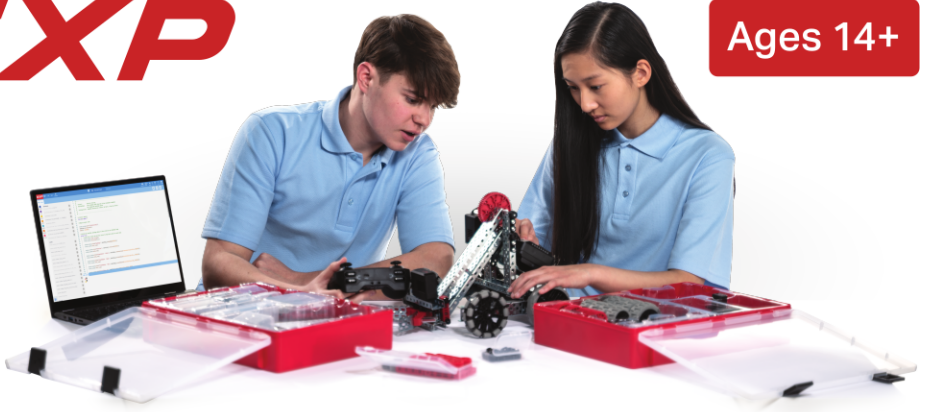## Free Training | Free Lesson Plans | Free Software

Instant answers to almost any question at **help.vex.com**
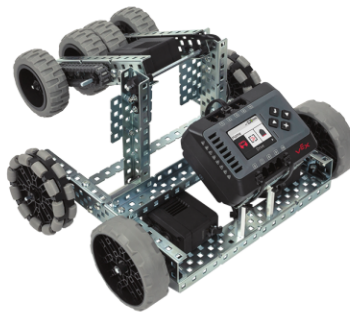
iq.vex.com

VEX EXP

Real World STEM for Ages 14+

Any educator can teach STEM with VEX EXP. Education Kits and Classroom Bundles contain all the hardware needed while professional development, curriculum and support are available to ensure you have the knowledge you need to deliver high quality STEM lessons.
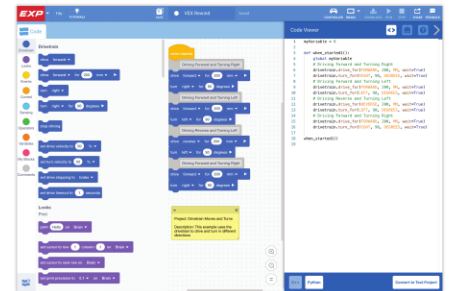
Ages 14+

Organised Storage
VEX EXP kits come packaged in storage bins where every part has its own dedicated location. Visual labels inside each bin keep everything organised and easily accessible.
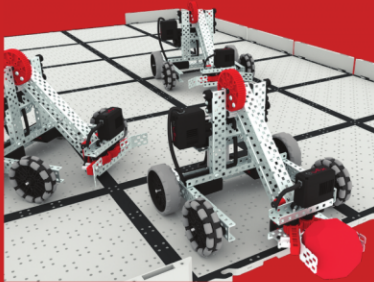
Real World STEM
STEM Labs make teaching integrated STEM easier than ever before by engaging students with project-based learning whilst utilising the motivational effects of educational robotics.

Coding for Everyone
VEXcode EXP brings Robotics and Computer Science to life for students at all skill levels. Choose between three different coding languages: Block-based, Python, and C++.

Free STEM Labs and Activities

VEX EXP STEM Labs function as "plugin" lessons that can fit into your existing curriculum. Multiple labs can be utilised in sequential order to create a unique, extended learning experience. STEM Labs promote collaboration and exploratory learning and contain everything teachers need to deliver rich STEM lessons.

Students enjoy hands-on-learning activities that allow them to apply technology, science, maths and engineering skills as they enjoy a 21st-century learning experience.

Mapped to **National Curriculum** and **Scottish Benchmarks**

STEM Games

Bring the excitement of competition to your classroom with STEM Games. VEX EXP Classroom bundles contain everything you need to run classroom-based competitions including configurable game fields and game objects.

STEM Games work closely with STEM Labs to challenge your students to apply their newly developed STEM skills in a friendly and challenging set of robot games. Different shapes and sizes of game objects allow students to experiment with different designs and to focus on optimisation to ensure their robots can operate in differing scenarios.

VEX EXP Classroom Bundles

VEX EXP is built for teaching STEM fundamentals to students ages 14 and up. EXP Education Bundles make STEM manageable for teachers and fun for students!

Classroom Bundles are the perfect solution for individual STEM classrooms. Bundles come in three sizes and include robot kits, extra parts, classroom charging, game field and game elements so you can bring the excitement of competitive robotics to your classroom.

Large Classroom

VEX EXP Education Kit

VEX EXP Education Kits make STEM manageable for teachers and fun for students. Every part in the kit has its own dedicated location with labels packaged in two storage bins

Includes:

- (1) EXP Controller
- (1) EXP Robot Brain
- (1) EXP Robot Battery
- (5) V5 Smart Motor (5.5W)
- (1) Optical Sensor
- (1) Distance Sensor
- (2) Bumper Switch
- (9) Smart Cables
- (2) Wrench
- (2) Star Drive Keys
- (1) USB-C Cable
- (2) Storage Cases
- (14) Storage Jewel Cases
- (1000+) Parts

£599.99

Classroom Bundle Contents

	Small Classroom	Classroom	Large Classroom
Number of Students	10	20	30
VEX EXP Education Kits	5	10	15
Field Tiles	16	32	48
Field Walls	16	32	48
Games Objects (Balls and Rings)	18	36	54
Parts Poster(s)	1	2	3
Extra Tools	5	10	15
Classroom Charger (for 5 Robots)	1	2	3
Spare Parts Kit with Storage	1	2	3
	£3,199.99	£6,399.98	£9,599.97

All VEX EXP Classroom Bundles are delivered free of charge to UK mainland addresses

Simple. Flexible. Powerful.

Brain
Connects your entire robot together and includes a colour screen for quick and easy control

Battery
Uses Lithium-ion technology to provide all-day classroom usage in most situations, and includes a button for quick battery charge indication

Controller
Enables wireless robot control and wireless code download

Smart Motors
Make your robots come to life with powerful and precise movement

Optical Sensor
Lets the robot see light, colour and gestures, even in darker rooms

Distance Sensor
Uses a safe laser to accurately detect distances without interference

Bumper Switch
Allows the robot to feel when it hits a wall or another robot and can be used as a limit switch

VEX EXP is also compatible with all existing VEX V5 sensors

Free Training | Free Lesson Plans | Free Software

Instant answers to almost any question at **help.vex.com**