

LEGO® EDUCATION SPIKE™ PRIME



LEGO® Education SPIKE™ Prime helps spark STEAM curiosity and confidence in middle school students. This concept brings together colourful LEGO building elements, easy-to-use hardware, intuitive coding language based on Scratch and student-ready units to continuously engage your classes regardless of their level. The endless creative design possibilities and easy-entry lessons of SPIKE Prime help students explore playful learning and build the STEAM skills they need to become the innovative minds of tomorrow.

**LEGO®
EDUCATION
SPIKE™
PRIME**



LEGO® Education SPIKE™ Prime Set

735047

The LEGO® Education SPIKE™ Prime set is the go-to STEAM learning tool for grade 6-8 students. Combine colourful LEGO elements, easy-to-use hardware, and an intuitive drag-and-drop coding language based on Scratch, SPIKE Prime continuously engages students through playful learning activities to think critically and solve complex problems, regardless of their learning level. From easy-entry projects to limitless creative design possibilities, SPIKE Prime helps students learn the essential STEAM and 21st century skills needed to become the innovative minds of tomorrow...while having fun!

KEY LEARNING VALUES

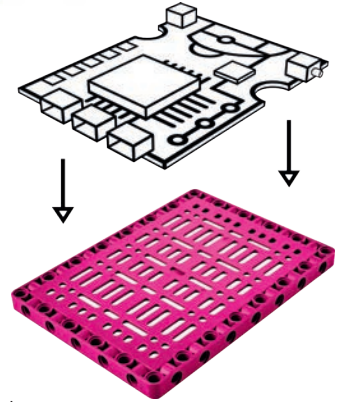
- Apply engineering design skills at each step of the design process.
- Develop efficient problem-solving and coding skills through decomposition of problems and algorithmic thinking.
- Design projects that combine hardware and software components to collect and exchange data.
- Work with variables, data arrays and cloud data.
- Apply critical thinking and develop life skills for the careers of tomorrow.



LEGO® Education SPIKE™ Prime Expansion Set

735048

Enter the exciting world of robotics competitions with the LEGO® Education SPIKE™ Prime Expansion Set. With 603 elements, including large wheels, banana gears, a colour sensor and large motor, this add-on to the SPIKE Prime Set (735049) features over 10 hours of targeted STEAM learning to build more advanced models and prepare them for the fun and challenging world of robotics competitions.



KEY LEARNING VALUES

- Learn the basics of creating and programming automatic robots using sensors.
- Develop collaboration and team-working skills to build a competition robot.
- Systematically test and refine programs.
- Use problem-solving skills and complete competition missions.
- Apply critical thinking and develop life skills for the careers of tomorrow.

REQUIRES ADDITIONAL PRODUCT:
LEGO® Education SPIKE™ Prime Set (735047)

LEGO® EDUCATION SPIKE™ PRIME

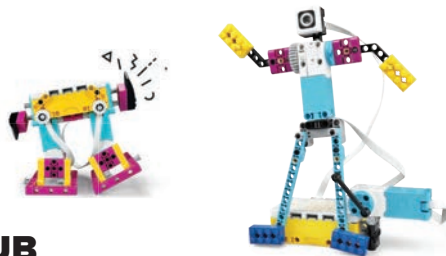
CODE CONFIDENTLY

The intuitive coding environment for tablets and computers takes the best from the popular coding language based on Scratch, creating a system that teachers and students will love.



SYSTEM REQUIREMENTS

LEGO® Education SPIKE™ Prime utilizes the coding language based on Scratch with your choice of operating system: iOS, Chrome, Windows 10, Mac and Android.



THE HUB

The heart of the LEGO® Education SPIKE™ Prime system is the programmable Hub. The SPIKE Prime Set also includes highly accurate motors and sensors that, together with a large variety of colourful LEGO building elements, lets students design and build fun robots, dynamic devices and other interactive models. Many attachment points on the hub, motors and sensors plus new, large building elements means students spend less time building and more time learning.

LEGO® Technic™ Large Hub

735051

This advanced yet simple-to-use brick-shaped device features 6 input/output ports for connecting a variety of sensors and motors, a customizable 5x5 light matrix, Bluetooth connectivity, speaker, 6-axis gyro, rechargeable lithium-ion battery and a micro USB port for connectivity with compatible computers and tablets.



LEGO® Technic™ Medium Angular Motor

735050

The ideal solution for high-power, high-torque applications, featuring an integrated rotation sensor and absolute positioning for true straight-line control.



LEGO® Technic™ Medium Angular Motor

735049

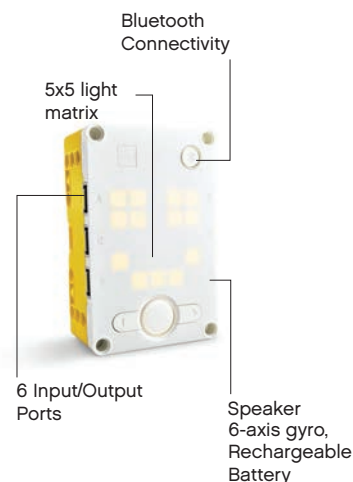
Build high-response robots. Low-design, integrated rotation sensor with absolute positioning and 1-degree accuracy.



LEGO® Technic™ Ultra Sonic Sensor

735053

Deliver high-accuracy result. 1-200cm range. +/- 1cm accuracy, programmable LED 'eyes' and an integrated 6-pin adaptor for third-party sensors, boards and DIY hardware.



LEGO® Technic™ Colour Sensor

735052

Distinguishes between 8 colours and measures reflected and ambient light from darkness to bright sunlight.



LEGO® Technic™ Force Sensor

735054

Measures pressures of up to 10 Newtons (1kg) for accurate, repeatable results. Can also be used as a touch sensor when the front button is pressed, released or bumped.



LEGO® Technic™ Large Hub Battery

735066

Rechargeable lithium-ion battery for use with the 735051 LEGO Technic Large Hub (sold separately). This high-capacity, 2,000 mAh battery can be charged while fitted to the hub using a micro USB cable and can also be removed quickly and conveniently without the need for tools. This battery is included with the Technic Large Hub (735051) and LEGO Education SPIKE Prime Set (735047).

Micro USB Connector Cable

735055

Connects compatible computers and tablets with the 735051 Large Hub for tasks such as transferring data, performing firmware updates and charging the large Hub.

LEGO® EDUCATION SPIKE™ PRIME



LEGO® Education SPIKE™ Robotics Competition Training Set

735646

Practice your skills or run mini robotics competitions with this exclusive kit. Includes all the components you need to work on your skills for coding & robotics competition. Whether it's getting ready for the upcoming FIRST LEGO® League season or just a local robotics tournament, be ready with this set.

Includes:

- 1 x LEGO® Education SPIKE™ Prime Set
- 1 x LEGO® Education SPIKE™ Prime Expansion Set
- 1 x Robotics Challenge Mat - General Skills Mat
- 2 x Sets of Storage Bin Clips

new



LEGO® Education SPIKE™ Prime & Raspberry Pi Expansion Kit

735651

When you combine the SPIKE™ Prime & Raspberry Pi Expansion set with your existing SPIKE™ Prime core set you get to expand & grow the possibilities! The Raspberry Pi Build Hat is compatible with the most recent generation of LEGO® Technic™ motors and sensors from the SPIKE™ Portfolio. The available sensors include a distance sensor, a colour sensor, and a force sensor. The angular motors come in a range of sizes and include integrated encoders that can be queried to find their position. The Build Hat also supports motors and sensors from the LEGO® building system. For more details visit: <https://www.raspberrypi.com/products/build-hat/>

Includes:

- 1 x LEGO® Education SPIKE™ Prime Expansion Set
- 1 x Raspberry Pi Build Hat
- 1 x Raspberry Pi 4 Starter Kit

new



5 Additional
projects
available through
Raspberry Pi