

Revolutionary Solutions For STEM Education



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STEM & Abilix

STEM, an acronym for Science, Technology, Engineering and Mathematics, plays an important role in education and the importance of which weighs as much as the Language and Writing in education nowadays. However, it's not just some education policy that combines several curricula together, it emphasizes that teachers should encourage students to solve problems with integrated knowledge.

Under such background, children's interests of technology can be inspired, which ushers them into the era of intelligent technology; children's science and technology literacy can be enlightened, which lays the groundwork for the cultivation of future elites. STEM, for a lot of kids, is a great doorway into learning new ways of thinking, reasoning and problem-solving, namely it can improve children's capacities in almost all aspects.

What's The Goal of Abilix Robotics in STEM?

The goal is NOT only to make the Robot.

The goal is NOT only to win the contest.

The goal is NOT only to understand science.

The goal is NOT only to use technology.

The goal of using Robotics is to learn how to think and solve problems. And once you can do that, you can solve any problems, no matter what the technology or situations occur.

Welcome to Abilix Educational Robot

Abilix, as the leading educational robotics company, provides not only rich didactical robots but also systematic curriculum that meets the requirement of STEM education. During the past 20 years, Abilix has tailored STEM projects for over 10,000 schools in more than 31 countries. Besides that, Abilix is the exclusive sponsor of WER (World Educational Robot contest), which is worldly held and with significant influence, attracting more than 300,000 contestants from over 31 countries each year. Looking ahead, Abilix will still devote itself to the global development of educational robotics, for which it will develop better and more comprehensive projects, to be the foremost supplier of educational robotics solutions.



Creative Brick Series(C-Series)

C1-T CREATIVE BRICK TRANSMISSION KIT

Projects 29
Components 421

With this kit, students are able to understand some common structures, simple machines and forces that are often encountered with in our lives. The kit also focuses on scientific exploration on the functions of various structures, principles of simple machines and the generation of forces ect. It helps to cultivate students' interests on hands-on activities and creative designing.



C1-X CREATIVE BRICK DYNAMICS KIT

Projects 19
Components 366
Controller 1

With this kit, users can complete 19 projects, such as hand-driven generator, mini engine hoist, screw jack, power saw, mouth-open beast, the walker, electronic wiper, the eye-rolling pet, conveyer belt etc.

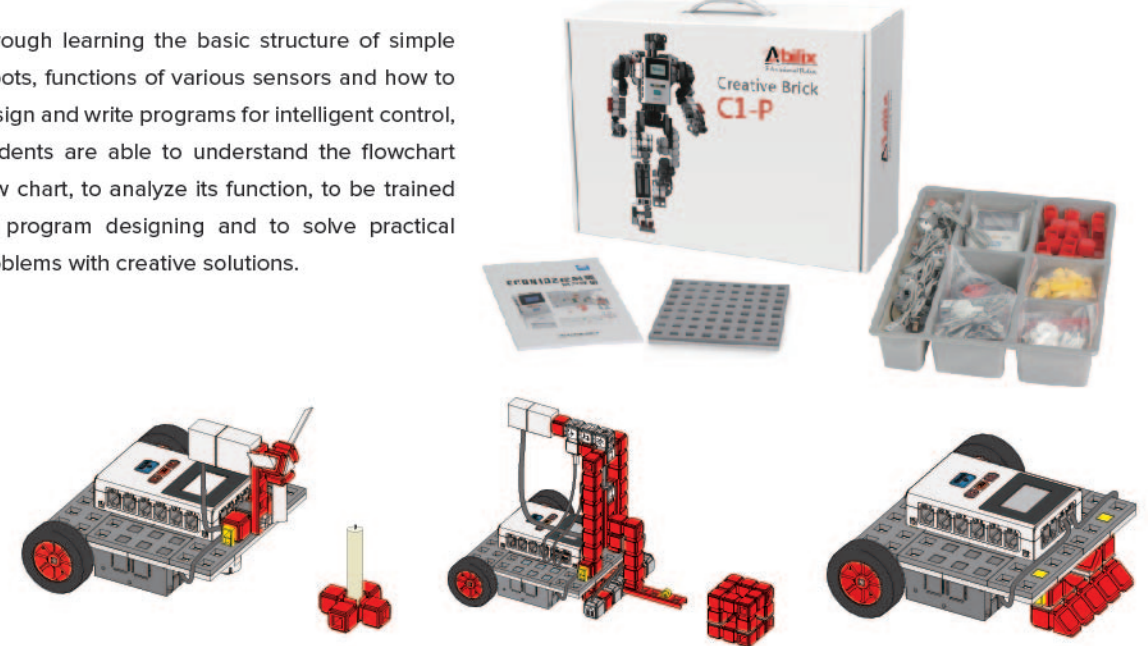
This kit aims to help students get a leg up in the area of power transmission. Students are encouraged to find out the working principles of transmission of gears, gear and rack, worm and worm gear, pulley, screw, belt, and crank link, through building a series of purpose-designed projects.



C1-P CREATIVE BRICK INTELLIGENT CONTROL KIT

Projects 20
Sensors 274
Sensors 13
Controller 1

Through learning the basic structure of simple robots, functions of various sensors and how to design and write programs for intelligent control, students are able to understand the flowchart flow chart, to analyze its function, to be trained on program designing and to solve practical problems with creative solutions.



C1-S STEM-KIT

Projects 18 Components 456 Sensors 14 Controller 1

STEM kit is not just a robot kit, but also system for class teaching. As a solution for class teaching, it offers STEM-based curriculum and multimedia teaching material, with which teachers can have an effective and systematic class experience.



Teaching Material

Discussing

Find a solution to make a car that can both dive into the sea and fly in the sky.

Knowledge Hub

Learn to use 1:1 steering gear box, 5:1 reduction gear box, worm and gear

Building

Build the magical car with a motor

Programming

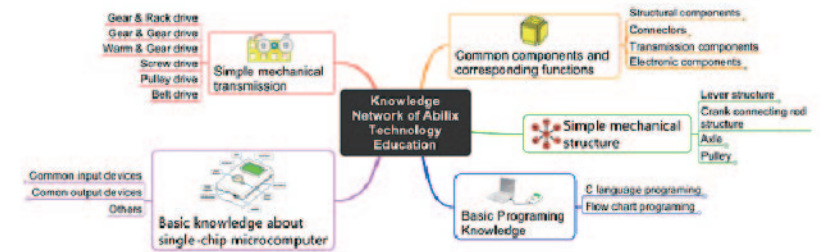
Make the car move with Motor block

Activity & Exploration

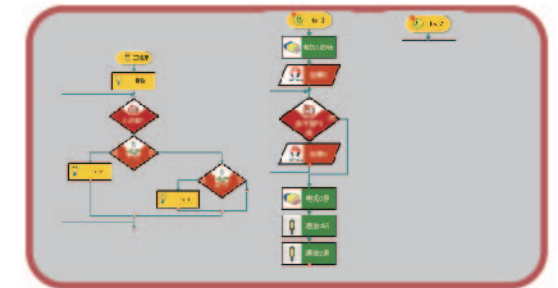
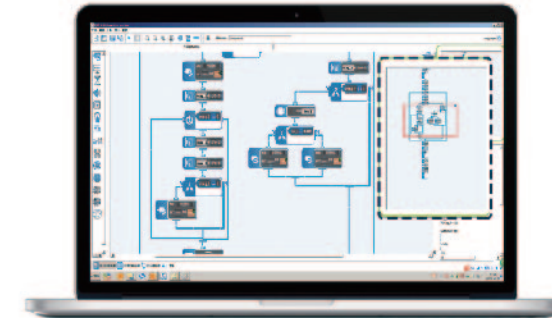
Do some contrast experiments to find out characteristics of worm and gear

Technical Improvement

Calculate the average speed of the car



Software



Key Learning Values

- Based on concise and rigorous component structure and programming environment, Abilix strives to provide a professional STEM-learning platform, where students can experience the concept of "learning while having fun".
- The six faces attachable feature can fully unlock students' imagination and creativity.
- The programming mode, which is visualized with flowchart blocks, can cultivate students' logical thinking and problem-solving ability.

Humanoid Robot Series(H-Series)

H1-B HUMANOID BASIC KIT

This Kit is designed for beginners. Core parts of the kit are 4 intelligent servo motors, 1 integrated sensor block, 1 controller, etc. Users can realize 14 teaching & activity models like greeting penguin, mechanical arm, music car, sound detector, cliff rover, clapping penguin, PTZ, angry duck and biped monster.



Chela



Earthworm



Robotic arm



Biped Monster

Key learning values

- The screw-free building feature is more suitable for classroom teaching.
- Fascinating robotics projects bring more fun to students.
- 3D action editor + flowchart programming makes programming to robot easier and more efficient.
- Program can be automatically converted between flowchart and C languages, which makes the programming more scientific and understandable, which makes the programming training more scientific and understandable.

H1-S HUMANOID STANDARD KIT

This Kit is designed for humanoid robot contests, as well as various robotics teaching activities. Core parts of the kit are 18 intelligent servo motors, 1 integrated sensor block, 1 controller (gyro inside), etc. It can realize 29 teaching & activity projects like humanoid robot, mechanical arm, robot dog, dinosaur, spider, research robot, scorpion, turtle and truck.



Spider



Scorpion



Dog

Design brief



Discussing



Select solution



Build & program



Activity

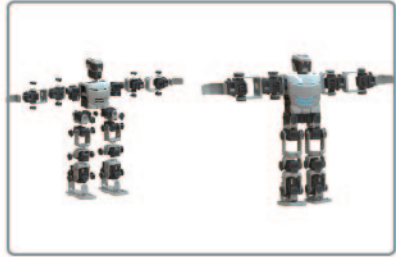


Communicate



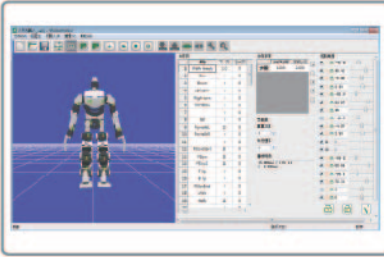
Hardware

1. Screw-free modular robot with 16 DOF
2. Modular design; reconfigurable projects
3. Quickly built projects; solid choice for classroom teaching



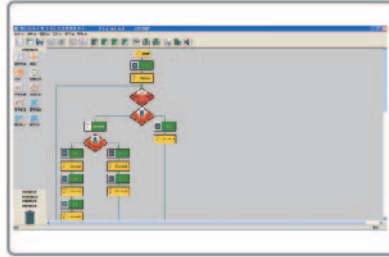
Software

1. Flowchart programming
2. Both flowchart and C language programming supported; action editor; 3D Construction Simulator
3. One click switching between three programming environment



Customize

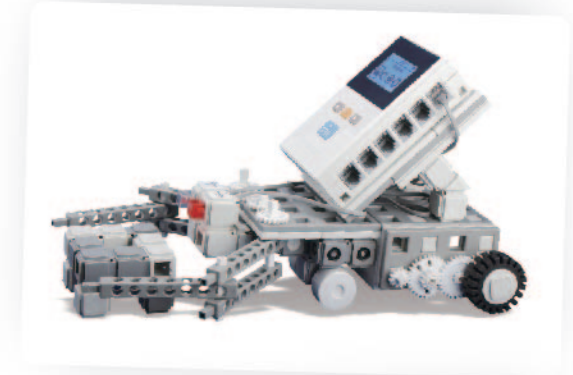
1. Design, build and program a functioning robotic system
2. Test robotic systems



Classroom Packs	Creative Brick				Humanoid Kit		Others	
	C1-X	C1-T	C1-P	C1-S	H1-B	H1-S	Curriculum	VJC
Starter Sets 2-3 Students	1	1	1	1	1	1	×	✓
Group Packs 20-30 Students	10	10	10	10	10	10	✓	✓

Why Choose Abilix ?

► Comprehensive Resources



► Professional Training



► Robotics Classroom Solutions



► Contact US

For further information about Abilix Educational Robot please feel free to contact us.

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