

# Vex Robotics Design System and Comprehensive Curricula

The **Vex Robotics Design System** can benefit your classroom by giving you the tools you need to engage your students in science, technology, engineering, and math through hands-on, team-oriented activities. This robotics kit is supplemented by standards-based **curricula** developed by the Robotics Academy at Carnegie Mellon University and Intelitek. Together, these teaching tools will:

- ⚙️ Teach key concepts in science, technology, engineering, and math
- ⚙️ Encourage hands-on, team-oriented activities
- ⚙️ Enable students to use problem-solving skills to address real-world situations

Begin using these tools in your classroom. Call 1-866-VEX ROBOTICS (1-866-839-7626) to speak with a representative about the **Vex Robotics Design System** today!

## Meets National Standards in:

### SCIENCE

- ⚙️ Motion
- ⚙️ Gravity
- ⚙️ Speed of light
- ⚙️ Electrical and mechanical energy

### TECHNOLOGY

- ⚙️ Design process and implementation
- ⚙️ Science, technology, and society
- ⚙️ Systems operations
- ⚙️ Invention and innovation

### ENGINEERING

- ⚙️ Control systems
- ⚙️ Basic electronics
- ⚙️ Motors
- ⚙️ Principles of machining

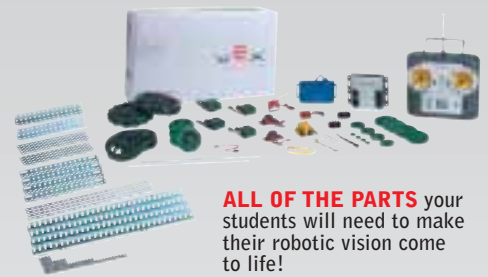
### MATH

- ⚙️ Percentages
- ⚙️ Ratios
- ⚙️ Problem solving
- ⚙️ Geometric concepts

## Lesson Plans

The Robotics Academy at Carnegie Mellon University is creating comprehensive standards-based curriculum resources that work hand in hand with the Vex Robotics Design System. Lessons are themed around the following concepts:

- |                             |                       |                      |
|-----------------------------|-----------------------|----------------------|
| ⚙️ Introduction to robotics | ⚙️ Projects/labs      | ⚙️ Basic electronics |
| ⚙️ Project management       | ⚙️ Engineering/design | ⚙️ Programming       |
|                             | ⚙️ Control systems    |                      |



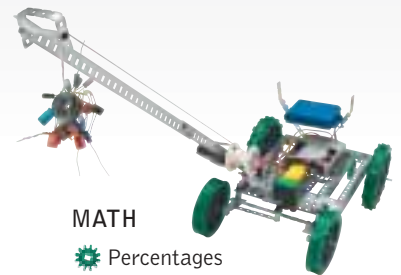
**ALL OF THE PARTS** your students will need to make their robotic vision come to life!

## Everything You Need in One Place...

The Vex Robotics Design System includes all of the parts your students will need to build an intelligent radio-controlled robot. Here's a preview of the parts and pieces that are included in the kit:

- |  |                     |
|--|---------------------|
| ⚙️ Programmable microcontroller              | ⚙️ Tires            |
| ⚙️ Six-channel hobby-grade radio transmitter | ⚙️ Gears            |
| ⚙️ Motor                                     | ⚙️ Sensors          |
|  | ⚙️ Hardware         |
|  | ⚙️ Inventor's Guide |

And much more, including additional kits to allow the inventor to enhance the design, performance, and functionality of the robot!



**Now, hand out the Amazing Robots reproducible! Introduce your students to robotics!**