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## WIZ-PRO1 CURRICULUM HIGHLIGHTS

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WIZ – PRO1 curriculum focuses on Science, Mathematics, Technology, Engineering and Programming Skills. This curriculum is designed to expand previous building knowledge gained through working with WIZARD1 (**LEGO**® Education WeDo). Students work as young Engineers and guided through activities to build and program working models and apply new knowledge and experience to create new models (robots) and programs.

### STUDENTS LEARN:



#### 1. Scratch Programming and Scratch Programming with **LEGO**®:

Scratch is the best way to introduce Computer Programming to young Students. It is a visual programming language.

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Students learn about Programming blocks (Motion, Looks, Sound, Data, Events, Control, Pen, Sensing, Operators, Extension block) in detail. Students learn to write programs in Scratch and to use programs to control the Robots they create from **LEGO®** bricks.

## **2. Creative Exploration:**

Students use their imagination and thinking to build their own Robots and using Scratch Programming software.

## **3. Guided Creative Exploration:**

Students learn to build Robotic Spirograph and one of the problem-solving activities like (Elevator, Safety Gate, Swing Ride, Carnival Game etc.) with guidance.



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#### 4. Expansion Kit Models: Theme (Construction Site)

Students build these models in team by developing teamwork and Leadership qualities.



Drawbridge

Forklift

Tower Crane

#### 5. LEGO® Boost (BUILD & CODE):

Students get the chance to work in team to construct five different robots and then program them. Programming blocks come in range of colors: Yellow Flow Blocks, Orange Sensor Blocks, Green Motor or Movement Blocks, Purple Sound & Light Blocks, Blue Action Blocks, Turquoise Interaction Blocks, White Math Blocks.

- Vernie the Robot
- Frankie the cat
- M.T.R 4
- Guitar 4000
- Auto Builder



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