# We help children grow into creators.

# **AFTER-SCHOOL STEM PROGRAMS**



Built by Me offers a variety of STEM enrichment programs at your location. Our classes are all interactive, collaborative, hands-on, project-based, and focused on using technology to create and learn new skills while having fun! Our talented and experienced coaches will guide children through the entire process, from developing their ideas to creating their projects. Our classes are small to make sure they have personalized attention and the chance to collaborate and socialize. The programs are all interactive, collaborative, hands-on, and project-based, focused on using technology to create and learn new skills while having fun!

#### Programs:

- LEGO® Robotics and Coding with Spike Construction Sets (Grades 1 3)
- LEGO® Robotics and Coding with Scratch and Spike Construction Sets (Grades 3 5)
- Game Designer with Scratch MIT (Grades 3 5)
- Robotics with mBot Robot (Grades 3 5)
- Robotics and Coding with Scratch MIT (Grades 3 5)
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#### Details:

- 1 to 2 hours/week x 6 8 weeks: weekdays: after 4 pm, weekends: mornings
- Up to 10 students per class, a minimum of 4
- At your facilities (room or pavilion with power and WIFI)
- We provide instructors, lesson plans, equipment and materials



### For more info: makers@builtbyme.com · 866-752-8458 builtbyme.com/afterschool

## **After-school STEM Programs**

#### LEGO® Robotics and Coding: (Grades 1 - 3)

#### Adventures, Amazing Engineers, Science in Our Lives, Space Odyssey, World of Sports

These fun, interactive programs will introduce students to coding and robotics using the LEGO® Education Robotics Construction Sets. Children will learn basic programming skills, simple engineering concepts, and the names of the robotic components. They will work in teams of 2 on guided projects building models, attaching sensors and motors, and using a computer to program the model's behavior. Children will gain confidence and understanding as they build and code their robots.

#### LEGO® Robotics and Coding with Scratch (Grades 3 - 5)

#### On the Go, Crazy Carnival Games, Science Connections, Funky Innovations, Ingenious Creations

These fun and interactive programs explore many aspects of STEM using LEGO® Essential Education Robotics Construction Sets. Students will work in pairs to build prototypes while learning the engineering design process. They will then code their designs with Scratch MIT, a block-based code, to perform various tasks and functions.

#### Game Designer with Scratch MIT (Grades 3 - 5) Adventures, Sports

Students will learn to code using Scratch MIT, a programming platform developed by MIT that is geared toward children. Students will design, build, test, troubleshoot and play games using this block-based code. Students will begin by creating a simple game and will continue developing and improving their coding skills by building more complex games. By the end of the class, they will create their own unique games to play at home and share with family and friends.

#### Robotics with mBot Robot (Grades 3 - 5)

Young engineers will discover the basics of coding and robotics as they learn how to program the mBot robot to complete a variety of tasks, building and expanding their coding skills along the way. This fun and interactive program will have them track and probably chase their mBots through mazes and other activities.

#### Robotics and Coding with Scratch MIT (Grades 3 - 5)

This class will teach students how to code their robots using Scratch MIT, a block-based code, to program their mBot robots through real-life projects, such as a solar car and a vacuum robot. Children will spend time coding and testing their robots to sense the environment and navigate obstacles. They will also have the chance to learn about mechanics and physics concepts such as sound and frequency, ultrasonic sensors and RGB LEDs. This class is very hands-on and a lot of fun!