Program: Wee-Bots  
Grade Level: Pre-K to 1  
Group Size: Max. 30  
Length: 60 minutes  
Location: At your site

OVERVIEW

This program introduces young children to the basic concepts of robotics and programming. Students learn about robots, what they do, and how they work. They are introduced to basic programming skills and practice using and applying directional language. Students gain hands-on programming and engineering skills through the use of programmable floor robots—Bee-Bots—and Lego Duplo bricks.

BIG IDEAS

• Every robot does a special job  
• Humans give robots directions through programming

OUTCOMES – What will the students know or be able to do at the end of the lesson?

• Program a Bee-Bot robot to follow a multi-sequence program  
• Give a basic definition for programming

Vocabulary

• Programming  
• Robot  
• Command  
• Right, left, forward, backward, turn

Extended Learning

In your classroom:  
• Junk Robots: Gather up some clean recyclables with no sharp parts. Use glue and tape to create a robot out of these materials. What is your robot’s job? Does it do something that might be boring or dangerous for a human to do? Or is it for entertainment?  
• Programmer Says: Take turns being the Robot and the Programmer. The Programmer gives the Robot simple commands to follow (walk forward, turn left, hop, etc.). Make a cardboard robot mask for the Robot to wear.  
• Bee-Bot App: continue programming the Bee-Bot virtually through this free app.
**Standards Supported** – NGSS/CCSS/21st Century Skills

**Next Generation Science Standards (NGSS)**

- Engineering Design: K-2-ETS1-1
- Motion and Stability: 5-PS2-1

**Common Core State Standards (CCSS)**

- ELA: Speaking & Listening: CCSS.ELA-Literacy.SL.K

**21st Century Skills**

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration
- Initiative and Self-direction
- Social and Cross-cultural Skills

**Reservations**

For reservations, please call 206-768-7175 or email: outreach@museumofflight.org.
For grant assistance, please visit www.museumofflight.org/education/grant-assistance.