Genuity Training

Introduction to Robotics for Kids

Course Overview

This fun, hands-on course introduces children to the exciting world of robotics through engaging, creative, and educational activities.

This instructor-led, live training (onsite or online) is aimed at beginner-level children who wish to learn how to design, build, and program simple robots while developing logical thinking and teamwork skills.

By the end of this training, participants will be able to:

Understand what robots are and how they work.

Build simple robots using LEGO Education SPIKE Prime kits.

Use block-based programming (Scratch) to make robots move, light up, and respond to sensors.

Collaborate creatively to solve fun robotic challenges.

Format of the Course

Interactive discussion and demonstration.

Hands-on group projects and guided builds.

Creative challenges and friendly competitions.

Course Customization Options

To request a customized version of this training, please contact us to arrange.

This course is available as onsite live training in Genuity online or live training.

Requirements

- None required

Audience

- Children aged 8 to 12 years' old
- Beginner-level robotics learners

Training Course Outline

Module	Topic	Coverage
Module 1	Introduction to Robotics	• What is a robot? • Examples of robots in daily life • How robots sense, think, and act.
Module 2	Getting Started with LEGO SPIKE Prime	• Exploring the robot kit and components • Understanding motors and sensors • Connecting to the programming environment.
Module 3	Building Your First Robot	• Assembling a simple mobile robot • Testing movement and basic control.
Module 4	Programming with Scratch	• Introduction to block-based coding • Making the robot move, light up, and make sounds • Programming the robot to follow simple commands.
Module 5	Sensor Fun and Challenges	• Using light, color, and distance sensors • Obstacle avoidance and maze navigation • Mini design challenge: build and code your own idea.
Module 6	Showcase and Wrap-Up	• Group presentations and demonstrations • Sharing ideas and reflections • Certificate presentation and conclusion.