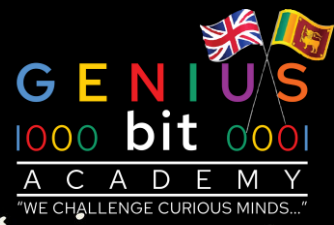


# NEXT GENERATION ROBOTIC EDUCATION



## ONLINE COURSE

"Work with real tools while you learn virtually"



## GENIUS bit ACADEMY

Foundation in Robotics – Level 2  
Age 6 to 10

### COURSE CONTENT

## WHO WE ARE

A bunch of disruptive critical thinkers who are determined to make a difference in young adults in Sri Lanka.

## OUR VISION

Arming the next generation kids with the technical know-how and the innovative skill-set necessary to challenge the frontiers of world technologies.

## OUR MISION

Armed with a strong basic foundation on IOT and robotic principles we are determined to challenge dormant young minds to think differently and to shape them to be intuitive problem solvers in electronics who would independently recognize the need to adapt to the constantly challenging landscape.

# COURSE CONTENT

## Programming Fundamentals

- Introduction to programming environment
- Simple programs using blockly programming
- Code with Blockly games (Turtle)

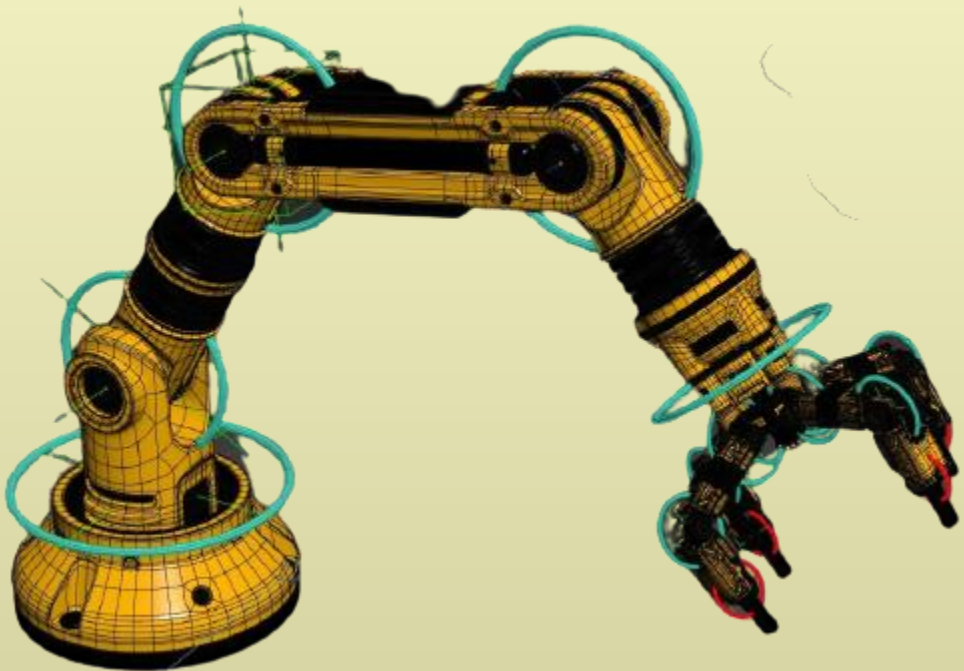
Blockly Games is a series of educational games that teach programming. It is designed for children who have not had prior experience with computer programming. By the end of these games, student will be ready to use conventional text-based languages.





## 3D Design & Modeling

- Introduction 3D design
- Adding and Modifying shapes
  - Learning objectives
  - Setting up the perspective grid
  - Adding and moving 3D shapes
  - Scaling and changing dimensions
  - Measuring with the ruler
  - Using hole shapes
  - Duplicating shapes
  - Creating patterns
- Creating a basic 3D design





**“The only way to do great work is love what you do”**

**- Steve Jobs -**



## Electrical and Electronics (Intermediate)

- Electronic circuit symbols
- Resistors and resistor code calculator
- Working principle of DC motor
- Digital Electronics
- Circuit simulation
- Advance external components connecting with Micro: bit

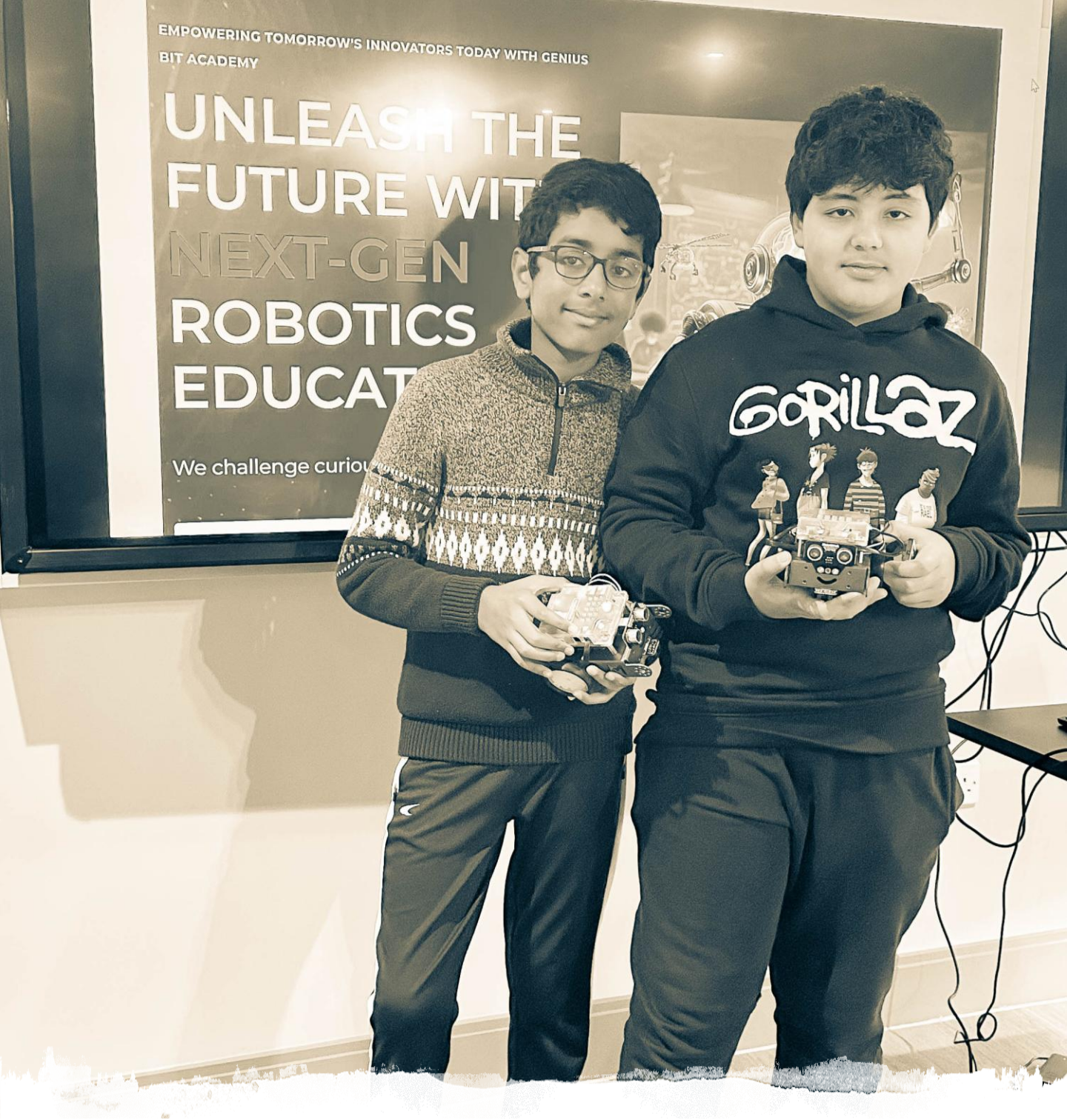


# KODU

- KODU programming
- Creating a KODU game connected within Micro: bit
- Making a KODU game that is related to Micro: bit







Entry Requirement – Completion of Foundation in Robotics - Level 1

Language – English

Methodology – Lectures / Practical

Duration – 20 Sessions





