Academy of Robotics
The Beginning of Innovation

Grades 3-11+

AI, Robotics Education and Coding for Beginners

Over 200 projects with lessons to integrate robot technology and support STEM education

Contents

OUR VISION
The vision of the academy is to popularize robotics education among the students, enhance their innovative thinking skills about the future world.

About Us

Academy of Robotics teaches robotics and coding for beginners. Our mission is to combine education and robot technology to provide children with the core computing skills that will best prepare them for the future.

❏ Our story began in 2018, when Dishant Yapa opened the first INO Kids learning center in Kottawa OSIS. When robot education became popular among school-age students. Therefore, it has been modified to allow all Sri Lankans to study online.

❏ Today we have been able to train over hundreds of students, including international students from different parts of the world. The Academy of Robotics has come a long way since its beginning.

OUR MISSION

- To showcase, encourage, and to evaluate the hidden talents of the school students.

- To update their awareness of the orientation of the future world of work and to improve innovative thinking and thereby to develop their inventive skills.

- To guarantee the access of education of Sri Lanka towards the rapidly developing technological tendencies of the world.

About Our Curriculum

Any Device
Robotics activities can be used on a Windows, Mac PCs.

Project-Based
Each robotics project includes a teacher guide, workbook, and resources.

Unlimited access of the materials
No need to count students or devices. Ideal for schools and learning centers.

Download Instantly
Access Google drive to download recording, videos, projects and coding lessons from an online library.

Access Google Classroom
Work from home. Access Google Classroom to open projects and upload files into the Classroom.
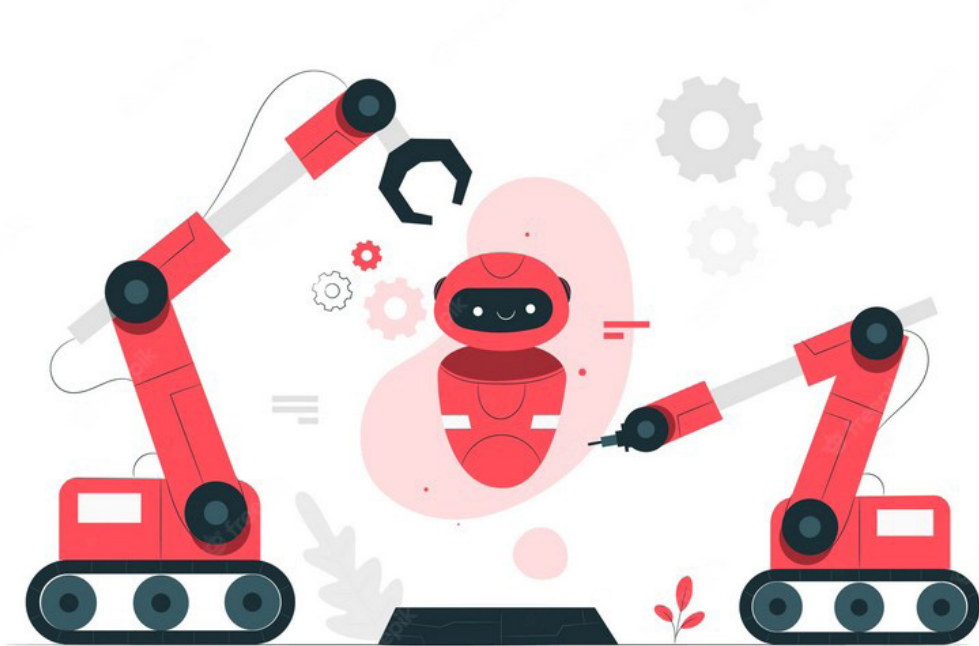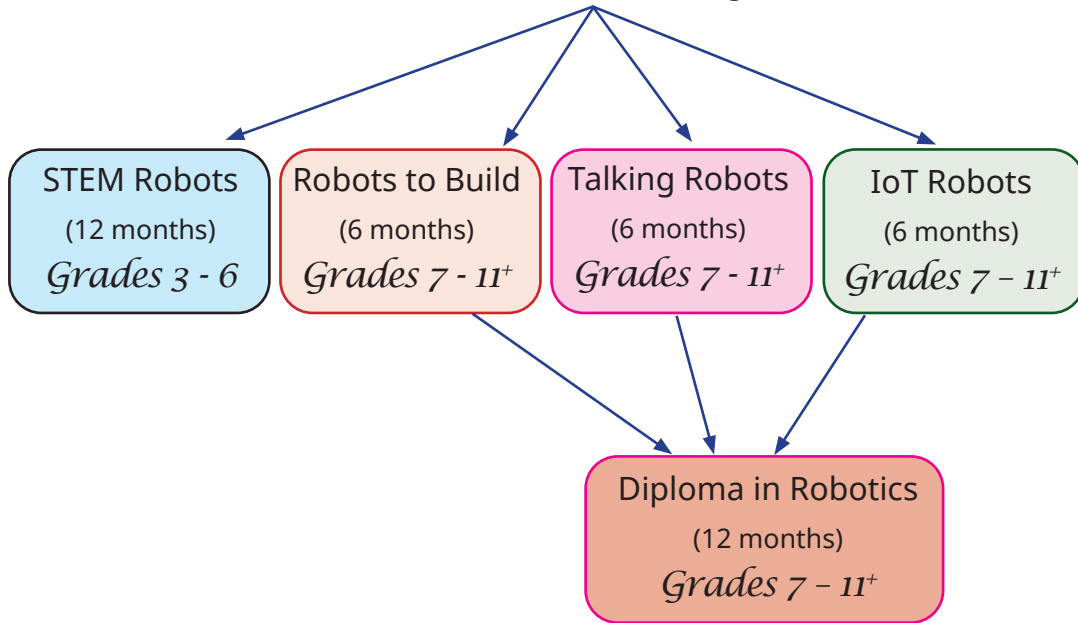
No Admission Fee
No admission fee. Joining the Robotics Club is free. No hidden costs. You can now pay in installments.

Choose the Right course for Your Students

What is the grade level of your students?
Match the Collection to students' grade level.

STEM Robots	Robots to Build	Talking Robots	IoT Robots
(12 months)	(6 months)	(6 months)	(6 months)
Grades 3 - 6	*Grades 7 - 11⁺*	*Grades 7 - 11⁺*	*Grades 7 – 11⁺*

Diploma in Robotics
(12 months)
Grades 7 – 11⁺

Diploma in Robotics for Kids with DP Coding
(Learn STEM Robots)

Grades 3 - 6

A collection of more than 100 projects teach essential robot technology skills. STEM projects, design electronics circuits, making games, animation with DP Coding, Micro-controller related projects with Magicbitt/ MagicCode and more!

Syllabus - Robotics for kids Program with DP Coding

Introduction to Robot Technology

The Evolution of Robots

Introduction to Code.org (Coding for Kids) Programming

Introduction of the DP Coding

DP Coding Projects 1-32 (1st Phase)

Basic electronics for beginners

STEM Projects

Practical Electronics Tinkercad

DP Coding Projects 33 -131 (2nd Phase)

Introduction to Scratch Programming

Scratch Programming

Introduction Magicbit and MagicCode

MagicCode activities (part1)

DP Coding Projects 132-135 (3rd Phase)

MagicCode activities (part2)

DP Coding Projects 136 -143 (4th Phase)

MagicCode activities (part3)

Diploma in Robotics with Arduino Programming (Robots to Build)

Grades 7 - 13

A collection of 30 projects teach essential robot technology skills. STEM projects, design and troubleshooting electronics circuits, Microcontroller projects: LED/ OLED, motors, buzzer, buttons, sensors, Bluetooth, Wi-Fi robot car and more!

Syllabus - Robotics with Arduino Program

Day 1 - Introduction of Robot Technology & The Evolution of Robots

Day 2, 3, 4 - Basic Electronics is from the Beginning

Day 5, 6 - Basic Electronics Components Test

Day 7, 8 - Study of Robotic Components and Motion and Identify Parts of Robots

Day 9 - Robotic Sensors

Day 10, 11 – Microcontrollers for robots

Day 12 – How to use Arduino IDE Software and Writing the codes

Day 13 - Writing the codes, what is a Variable and Data

Day 14 – Arduino Data Type and Arduino Programming

Day 15, 16 - Display text, logos and images on OLED screen

Day 17 - Pulse Width Modulation (PWM) and Generate tones from the buzzer

Day 18 - Magicbit RGB LED Module, Ultrasonic sensor module, IR Receiver LED module

Day 19 - IR Proximity Sensor module, Servo Motor, Assembly instructions for a motor robot car kit

Day 20, 21 - Bluetooth Control Car

Day 22 - Line Following Robot Car

Note: Course duration is 6 months with the 2 online exams.

Diploma in AI (Artificial intelligence) with Python Language (Talking bots with Python)

Grades 7 - 13

Everything about AI and A-Z Python robotics language can be learned simply to make talking AI robots. Also, Java Scripts, and Machine Learning will be given simply from the beginning.

Syllabus - AI with Python Language

Day 1 - Introduction of the AI bots, Computer Ports and ROS

Day 2 - Identify Computer Programming (Scratch Program)

Day 3 - History of Artificial Intelligence (AI)

Day 4 - How AI Works

Day 5 - AI Activities

Day 6 - AI with ML

Day 7 - Machine learning

Day 8 - Machine learning part 2

Day 9 - AI and ML Extra

Day 10 - Java Scripts

Day 11 - Introduction Python Language

Day 12 - Python Programs - Variables and data types

Day 13 - Flowcharts and Conditional Statements

Day 14 - Variables and Data types

Day 15 - Python Program Statements

Day 16 - Turtle graphics and Function in Python

Day 17 – Turtle graphics on Python and Talking bot

Day 18 - Data types in Python and Talking Robot

Day 19 - Python Programming Practical

Day 20 - Talking bot in Python

Day 21 – Animation in the Python Part 1

Day 22 – Animation in the Python Part 2

Note: Course duration is 6 months with the 2 online exams.

Diploma in Master Robotics with MicroPython
(IOT Robots)

A collection of 30 projects teach essential robot technology skills.

Everything about how to use IoT techniques to design robots. Also, Programming robots using MicroPython, and more!

Grades 7 - 13

Syllabus - Master in Robotics with MicroPython program

Day 1 - Practical Electronics

Day 2 - Network essentials

Day 3 - Robotics Applications

Day 4 - Computer Hacking

Day 5 - Data Communication

Day 6 - History of Internet/ IoT

Day 7 - Internet of Things for beginners (IoT)

Day 8 - Magicblocks programming

Day 9 - Magicblocks inside

Day 10 - Magicblock Projects (Part1)

Day 11 - Magicblock Projects (Part2)

Day 12 - Magicblock Projects (Part3)

Day 13 - Magicblock Projects (Part4)

Day 14 - Magicblock mobile apps

Day 15 - MicroPython programming

Day 16 - MicroPython Projects (Part 1)

Day 17 - MicroPython Projects (Part 2)

Day 18 - MicroPython Projects (Part 3)

Day 19 - MicroPython Projects (Part 4)

Day 20 - MicroPython Projects (Part 5)

Note: Course duration is 6 months with the online exam.

Price List

The Academy of Robotics curriculum is aimed at primary and secondary school students and anyone with a genuine interest in learning robotics.

Course Name	Course fee (LKR)	Price for the Robot Kits (LKR)
Robotics for kids with Coding diploma course - (For Ages 7 -14/ Grade 3 - 9 Students) 12 months	Monthly fee: 1,500/=	10,000/=
Diploma in Robotics with Arduino Programming (For Ages 11 - 17/ Grade 6 - 12 Students) 6 months	Monthly fee: 1,500/=	18,000/=
Diploma in AI (Artificial intelligence) with Python Language (For Ages 12 - 17/ Grade 7 - 12 Students) 6 months	Monthly fee: 1,500/=	N/A
Master in Robotics diploma course (For Ages 12 - 17/ Grade 7 - 12 Students) 6 months	Monthly fee: 1,500/=	12,000/=

Frequently Asked Questions

The Academy of Robotics curriculum is aimed at primary and secondary school students and anyone with a genuine interest in learning robotics.

What is the Robot Technology?

Robotics is the intersection of science, engineering and technology that produces machines, called robots, that substitute for (or replicate) human actions.

What is the purpose of Teaching Robotics?

The desire of many school-age students is to create something for themselves and show it to others. So our program will give them unparalleled courage to create that design.

Launched in the year 2019 at the OSIS Institute of Education, Maharagama, this program has so far soothed the minds of four groups. The program is implemented in four phases for students who are passionate about learning about robots.

The program presents the first stage of learning how to gain robotics knowledge using STEM education, the second stage involves working with robotics and electronics using Arduino, and the third stage shows the robot includes Scratch and Python computer programs used to create robots. The final stages include Magicblocks strategies for improving IoT technology and MicroPython computer programs used to create robot-related activities.

Why this program is important for your student?

In today's world of technology, preparing students for the future is more important than ever. Teaching robotics to school children can enhance their creative and innovative thinking skills.

The program is conducted and an examination is held in the last week of each month during the term and those marks are added and at the end it is included in the valuable certificate given by us.

It is also possible to refer your children to the All Island School Robotics Competition held by the Ministry of Education every year from 2019 onwards.

How can I join this program?

Now you can send a WhatsApp message with entering name of your student, grade and school and Gmail address to the 077 295 3717 mobile number.

This program is running on Google Meets online every Saturday, Sunday Monday and Wednesday. Also, you can request the recordings if you are not able to come online.

Contact Us

Program Head

Dishant Yapa,

PgDip. Computing (L'pool,UK), NDT Electronics & Telecom (UoM), MCP, MOS, ECDL (UK)

Computer lecturer and Science writer

Founder & CEO - Academy of Robotics

Registration No: W/209201

info@srilankarobotics.lk

+94 77 295 3717 (with WhatsApp)

Website - www.srilankarobotics.lk

YouTube Channel - www.youtube.com/c/srilankarobotics

Facebook Page   - www.facebook.com/srilankarobotics

Facebook Group - www.facebook.com/groups/SriLankaRobotics

LinkedIn - https://www.linkedin.com/in/dishantyapa/

Blog page - https://srilankarobotics.blogspot.com/

Twitter - https://twitter.com/LankaRobotics

Instagram- https://www.instagram.com/srilankarobotics/

Academy of Robotics

Tel. 0112182996

No. 4, Madakanda Road, Araliya Garden

Mattegoda, Sri Lanka,

Postal Code 10240