

AutoBots's Robotics Summer Camp 2016

Age group: 8 and above

Duration: max. 30 days

Course Contents:

Course materials will be provided

BASIC ELECTRICAL:

Voltage

Current

Power Supply - Types and Specifications

Introduction to Switches-Types- SPDT, Push-to-on, Momentary Switch, Interfacing the Switch types

Electromagnet -concept and working/ Motor - concept and working/ Direction Control of Motor

DC Geared Motor - Types and Specification/ RPM/ Torque/ Selection of motors/ Parallel control of motors/ DC Batteries - Types and Specification

ROBOT MADE: simple insect type obstacle avoider robot (**take-away kit**)

BASIC ELECTRONICS:

Introduction to Sensors - Types and use

Infrared Sensor - Concept and Working, Interfacing IR Sensor

Working and control of motor, H-Bridge working

BASIC PROGRAMMING:

Programming in a fun-way

Introduction to autonomous robot

ALGORITHM:

Tabular Algorithms, Analyzing the possible conditions/ Simulating the output/ Concept of Obstacle Avoider Robot/ Concept of Pit Avoider Robot/ Concept of Light follower Robot/ Concept of Wall follower Robot/Concept of Line follower Robot/ Concept of Computer Controlled Robot.

PROGRAMMING SOFTWARE:

Introduction to fun way of programming, Functions- Instructions, Conditions, Loops, SNAP Software, Installing Software, Identifying COM Port, Assigning a port as Input or Output, Writing digital outputs to a port, Writing analog outputs, Reading digital inputs, Reading analog inputs, Performing conditional actions based on inputs, Performing continuous actions based on inputs, Concept of delay and its effects, PWM

concept and working, Working with speed control of motors and brightness of LEDs, Programming robots on various algorithms.

ROBOTS MADE:

1. Obstacle Avoider Robot, (take-away kit)
2. Pit Avoider Robot, optional kit
3. Light follower Robot, optional kit
4. Wall follower Robot, optional kit
5. Line follower Robot, optional kit
6. Computer Controlled Robot. optional kit

***optional kit cost(total) 2000 INR**

**Entire course cost
(including material+take away kit)
(excluding Podar jumbo rent)**

5000 INR only

AUTO2TO
A TEAM OF ROBOTIC GEEKS

TWO WEEKS COURSE ON
BASIC OF ROBOTICS

ENGAGE YOUR KIDS THIS SUMMER
WITH COOL ROBOTS

TAKEAWAY ROBOTS
FOR EVERYONE

FOR AGE 8 AND ABOVE

COMPETITION WINNERS WILL
GET EXCITING PRIZES

VISIT YOUR NEAREST VENUE
FOR LIVE DEMO OF THE COURSE

Venue - Podar Jumbo Play School
#258, Sachithanapuram layout,
Thalambur village, Navallur, OMR,
Chennai 600130

A GRAND ROBOTICS SUMMER CAMP

AUTOBOTS ACADEMY OF ROBOTICS

FOLLOW US @ WWW.FACEBOOK.COM/AUTOBOTSACADEMY

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*Banner address can be changed after reviewing

THANK YOU