Techno Gravity Solutions

JUNK FUNK

Basic Robotics Workshop | TGS

Junk Funk: Workshop Details

Description



As the name suggests, it is a conglomeration of electronics, e-waste & innovation. It is a unique Workshop, one of its kind in the world where students are taught to develop, or should we <u>INNOVATE</u> using e-waste; basically components of CD/DVD players & cassette players. Some of its parts are used to develop electronic devices called Robots in common engineering terms.

<u>*Zipper*</u>: It is a unique device that runs on a wire. It is self-balanced and very quick; developed with a focus on future development of high-end robots for rescue operations, component transfers etc.

<u>*Craz-e*</u>: It is a small remote controlled car, which runs like mice. It runs in all 4 directions as per signals given & is very swift. It is smaller than the size of a palm with its LEDs in night vision.

This is a workshop conducted by TGS super-EXCLUSIVELY conducted by TGS only.

Kit contents

- 1. Introduction to robotics
- 2. Basic Control Systems
- 3. Locomotion/Mobility
- 4. Actuation
- 5. DC Motors Analysis
- 6. Driving tyres
- 7. Remote Design
- 8. Electricals
- 9. Designing
- 10.E-Waste utility

Duration



07 hours in total for learning and assembling.

Although the time duration can be managed according to requirements. If a competition is required at the end, we can have that which will add another 01 hr. to the workshop.



Course contents

Components



1. DC gearless Motor – 6000 rpm	
a. Craz-e	$2\mathbf{x}$
b. Zipper	2x
2. Craz-e Chassis	1 x
3. Zipper chassis	
a. Motor L-fitting	2x
b. PCB	2x
4. Craz-e Wheels	2x
5. Caster wheel	1 x
6. Zipper Grippers	2 x
7. LED's – Blue – 5 mm	2 x
8. Si Cells - 6 vol.	2 x
9. Wire -6 core (meter)	4x
10. Screw Connector (12 pins)	1 x
11.PCB Remote + Box	1 x
12.Nut & Bolts for	
a. Motor	8x
b. L fitting	4x
c. PCB	4x
13. Batteries	2x
14. Battery Snaps	2x
Add-ons	
15.LED shop	1x
Accessories	
16. Wire Stripper	1 x
17.31 in 1: Screw driver Set	1x
18.CD + Cover	1 x
19. Manual	1 x
20. Hand drill	1x
21.Drill Bit	1 x
22.DC Adaptor (12v variable)	1x

+ Packaged Carry case



 $\ensuremath{\mathbb{C}}$ Techno Gravity Solutions

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Contact us for any relevant information.