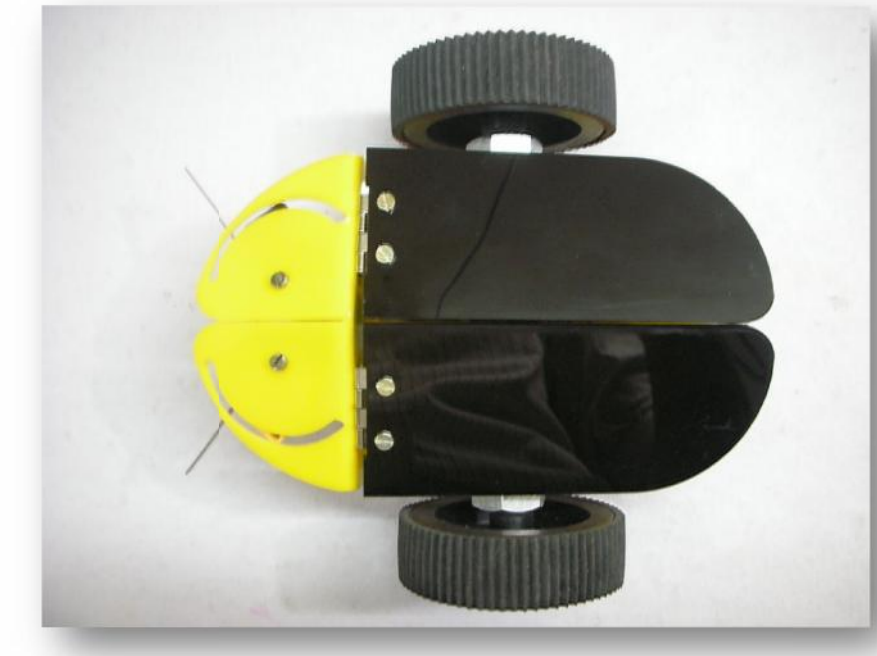
TECHNO
GRAVITY
SOLUTIONS

ECAN



ECAN – Electrical Circuits and Networks

Description

We offer practical oriented Course for demonstrating and designing electrical networks which can be applied to develop a Robot.

Tentacles – a robot which is a semi-autonomous is based on the concept of electrical networking, using simple closed and open circuits. It also inducts Ohm's law concepts among many others.

"Tentacles" can actually be perceived to resemble as an *'Insect'*. And how is it so, that to using electrical networks?
It does not consist of any brain (micro-controller etc.) or any extravagant circuit. Rather it follows simple laws of electricity & utilizing components smartly that makes it such a pleasure to have as an inclusion into the list of your expertise. And we call it an insect because many insects actually have the same kind of interface with environment (although biological).

The component which makes it autonomous is typically mechanical in characteristics. It is also first step towards understanding '**Relays**'.

Thus, it will be the first step towards understanding *electro-mechanical interface*, *relays*, Robot designing (*aesthetics*), electrical concepts (*ohm's law, open &close circuits, voltage &current dividers*); & that too without having any kind of mind-boggling circuits. YET we create a mind-boggling device (or should we call it a BOT this time) which is simple in its structure.

Course contents

1. Types of robot control
2. Basic Electronics
3. Robot Dynamics
4. Power supply
5. Electrical Circuits
6. Electrical Networks
7. Anatomy of "Autonomous"
8. Relays & Micro-switch
9. Logic circuit design
10. Application Circuit Prototype

Duration

24 hrs. in total for learning and assembling.

Theory : Practical = 35 : 65

8 days X 3 hrs. per day i.e. 8 sessions in all

Kit contents

Components

1. DC Geared Motors – 45 rpm	2x
2. Bracket	2x
3. Wheels – rubber grip	2x
4. Caster wheel	1x
5. Chassis	1x
6. LED Light flash	2x
7. Wire –2 core	1m
8. Micro switches (Long Lever)	2x
9. Micro switches (Roller)	2x
10. Nut & Bolts for	20
11. Batteries	4x
12. Battery Snaps	4x

Add-ons

13. Application circuits	1x
14. Breadboard	1x

Accessories

15. Wire Stripper	1x
16. Screw driver (minus)	1x
17. CD + Manual	1x
18. Carry case	1x