

# SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY MANAGEMENT AND GRAMOTHAN

PRESENTS

A National Level Workshop on

## ROBO-BRICKS

(24<sup>th</sup> & 25<sup>th</sup> Apr' 10, SKIT)

By

Robosoft Systems Private Ltd., Mumbai

### Duration:

It's a two day workshop. In Robo Bricks, you will gain valuable by applying theoretical knowledge gained during the workshop through **hands-session experience**. Incoming students with little or no Robotics knowledge will finish this course empowered with the ability to visualize and create innovative designs in the field of robotics. Workshops comprise of **practical labs** and **theory sessions** where much emphasis is given to learning-by-doing methodology.

### Workshop Includes:

#### Overview of Robotics

#### Locomotion

Methods  
Wheeled  
Floating  
Flying  
Crawling  
Climbing

#### Transmission systems

Gears  
Chain drive  
Belt drive  
Linkages  
Rack & pinion

#### Method of Designing a Robots / Machine

#### Actuators

Motors  
Engine

#### Introduction to various control systems

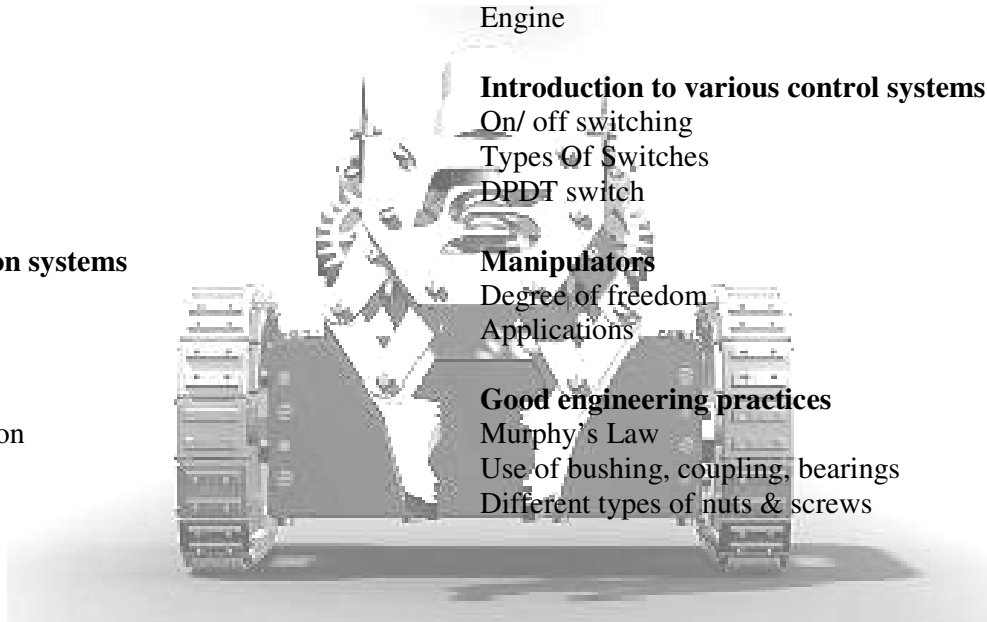
On/ off switching  
Types Of Switches  
DPDT switch

#### Manipulators

Degree of freedom  
Applications

#### Good engineering practices

Murphy's Law  
Use of bushing, coupling, bearings  
Different types of nuts & screws



### Registration Details:

Participants have to register to the mentioned co-ordinators latest by **22<sup>nd</sup> Apr' 10** in a team of **max 4** students. Charges are **Rs. 4500 /- ( per team )**

This cost includes:-

- 1 **Robo Bricks Kit** with **wired joystick module**
- 2 day training program
- CD content of Tutorials, Robo Bricks construction manual, resources, cool videos...and much more!!!
- **Robo Bricks 2 day course National Level Certificate**

**RoboBricks Kit Details:**

- 1 –Laser cut steel chassis.
- 1 –Laser cut gear box.
- 2 –Nylon worm gear.
- 3 –Nylon spur gear.
- 1 –Laser cut parallelogram robotic gripper set.
- 4 -D.C geared motors with.
- 52 –Pieces of light weight modular chain set with diamond grinded pins.
- 4 –Light weight & rigid plastic wheels with metal bushing.
- 1 – Wired Joystick Module.
- 1 – 4 motor driver circuit.
- 1 – Adapter.
- Nylon bushings, couplings, dead axles, robot building tools, robot building lugs.....and much more
- CD with useful tutorial, videos and links.

**Student Coordinators:**

Sumeet Kumawat (9887556751)

Sumit Jain (9024741421)

Pooja Gahlot (9982085580)

**Faculty Co-ordinator:**

Mr. Sarfaraz Nawaz

For more details visit :- [www.robosoftsystems.co.in/robobricks.html](http://www.robosoftsystems.co.in/robobricks.html)