



**BITS Pilani**  
K K Birla Goa Campus



## **Propeller Display Workshop**

Propeller Display workshop is on designing and programming of autonomous bots in the form of Propellers. LED's are rotated at speed superior to human eye's ability to distinguish objects, which makes a dot matrix float in the air. A motor spins the propeller and a microcontroller changes the pattern of LEDs to generate patterns and designs.

Participants will learn about logical implementation in hardware, applications of microcontroller and designing and programming of autonomous bots.

**Duration: 2 Days**

**Cost: 800/-**

**Team/Individual : Individual**

**Registration Link :** <https://thunder6.typeform.com/to/JnHgwI>

**Structure and Course:**

Day 1

### **Introduction to Embedded Systems**

- Introduction to ATmega16.
- Introduction to LED's, DC Motors.
- Introduction to programming in Embedded C

### **Integrated Chips and Sensors**

- Introduction to Persistence of Vision.
- Population of Circuit for Propeller Clock.

## Day 2

- Introduction to IR Sensors, Interrupts.
- Timers

### **Integrated Chips**

- Program for LED Interfacing using Timers and Interrupts.
- Program for Propeller Clock