

# ElectroWar

### **Problem statement:**

The participants need is to make such a sound system that can sense the music and produce dancing LED lighting.

#### Task:

The teams need to implement following:

- 1. A module to receive the audio from speakers.
- 2. Decode the sound for LEDs.
- 3. The module should have an interactive LED display for the user.

If time and cost permits, you can improve the module.

Note that though the extra features contain a significant portion of the allocated marks, but they would be taken into consideration only when the participant team has fully implemented the compulsory tasks. The participants are encouraged to add as many extra features as they want but not at the cost of robustness and noise reducing capability of the circuit.

## **Rules & Regulations:**

- Students enrolled in any undergraduate program in a recognized institute are allowed.
- Each team can have a maximum of 3 participants.

### **General Rules**

- Only basic ICs and microcontrollers are allowed. Use of any other IC should be intimated to us and verified.
- You may use any microcontroller based development board.
- If you use any self-made fabricated module, you need to prepare the Diagrams.
- All the participating teams are supposed to submit their final codes/data sheet used.
- Judges decision will be final and binding to all.

Institute



# **Judging Criteria:**

- The Judging will be subjective.
- All basic compulsory features should be implemented and only after their evaluation would the extra features would be considered and assessed.
- The effectiveness of the hardware and software used in solving the problem statement.
- User interface of the device.
- Robustness and innovation in design of the device.
- Cost effectiveness of the device.

