

**TRL  
2K23**

# TAMILNADU ROBOTICS LEAGUE

**SEASON 2**



**SIMPLE MACHINES**

## TAMILNADU ROBOTICS LEAGUE

**SOUTH INDIA'S BIGGEST ROBOTICS COMPETITION**

**SEASON - 2**



**Propeller Technologies**

AI | ROBOTICS | DRONES | 3D PRINT



**STEM**  
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EDUCATIONAL REFERENCE  
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**STEM**  
CERTIFIED  
EDUCATIONAL REFERENCE  
#46766422

**For More:**

7540040079 / 7540040071  
propellertechs@gmail.com

 @propellertechs

### Events

1. **Robotics Junior:** To solve the arena based on the problem statement
2. **Robotics Senior:** To solve the arena based on the problem statement
3. **Makeathon:** To design the solution for any social problem

### Registration

- The registration fee per student per event is **Rs. 499/-**
- You can contact the below mentioned mobile number to initiate the registration process **7540040071 / 79**
- Event venue - **National College, Trichy**
- Date - **October - 14 - 2023**

## PRIZES


### Robotics Junior

- 
- Winner
  - First Runner up
  - Second Runner Up
  - Best Robot Design
  - Best Robotics Controller
  - Best Team

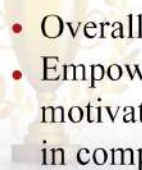
### Robotics Senior

- 
- Winner
  - First Runner up
  - Second Runner Up
  - Best Robot Design
  - Best Robotics Controller
  - Best Team

### Makeathon

- 
- Winner - **Cash Prize**
  - First Runner Up
  - Second Runner Up
  - Best Novel Idea

### Special Prizes:

- 
- Overall Championship
  - Empowering Excellence: School that motivates maximum students to participate in competitions to get exposure





### Makeathon Problem Statement



Student teams are put to create an innovative solution that could solve the social problems which would come in the near future.

#### Who can Participate?

Open to all: Grade 6 To 12

#### Actual Task Description

Participants have to build an innovative working model based on the above problem statement My Idea My Innovation. The students can showcase either static models or working models

#### General Rules:

- Participants have to display their innovation only in the allotted slot number
- Minimum of three and maximum of four members in a team is allowed.
- Name of the innovation should be displayed clearly on chart paper or using any other source.
- Should clearly explain the concept of your own innovation.
- Participants can renovate or arrange their innovation before the judges arrive.
- During the evaluation period, If the participant is not available in the allotted area then the team will not be considered for evaluation.
- No hazardous chemicals, open flame, torches, or burners may be used without getting pre-approval from event organizers.
- The judge's decision will be considered final

### Makeathon Problem Statement

#### Evaluation Criteria

Criteria	Points
Unique idea (Prototype Model)	20
Transparency	30
Presentation	10
Knowledge of the concept (I.e, explaining the concept with appropriate data)	20
How feasible is it to implement the prototype model in real life?	20

#### Important Note

The idea of this makathon competition is to promote real innovations in our society that could solve various social problems we are facing. In order to support the event's objective, **we will neglect certain electronic components and projects that are commonly seen in many competitions** or have already been implemented in real-time models

S.NO	PROJECT	S.NO	PROJECT
1	Line Follower Robot	9	Bluetooth Car
2	Obstacle Avoider Robot	10	Fire Alarm
3	Follow Me Robot/ Trolley	11	Smart Home
4	Blind Stick	12	Train Accident Avoiding System
5	Night Vision Specs for Drivers	13	Water Level Indicator or Monitoring through IoT
6	Earth Quake Alarm	14	Sanitiser Dispenser
7	Bio Gas	15	Agriculture Robot
8	E Vehicle	16	Solar Heater / Street Light

#### Electronic Component:

The usage of any type of IR sensor specified below is not permitted



IR Sensor Module



PIR Sensor



Industrial IR Sensor



IR Transmitter and Receiver (TSOP)



IR Array Sensor





## WHAT IS TAMIL NADU ROBOTICS LEAGUE



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The **Tamil Nadu Robotics League (TRL)** is South India's Biggest Robotics Competition that aims to celebrate Science, Technology, Engineering and Mathematics (STEM) and make innovation an area of passion for the young minds of the developing world. It intends to capture the attention of young innovators by giving them problems and challenges that not only stretch their imagination but also creates solutions to burning issues.

With our inveterate vision of **“Together we create makers of the world”** Propeller Technologies R&D Pvt Ltd is missioned to intersperse a myriad of makers across the world by imparting real-world connectivity in Tech education and providing the best **STEM** education imaginable along with STEM kits, Robotics competitions and several other learning resources.

**100+**  
SCHOOLS

**250+**  
ROBOTS

**3000+**  
STUDENTS

### THEME FOR TRL - SEASON II

### “SIMPLE MACHINES”

We invite students to build bots and navigate through an arena designed using the concepts of simple machines that they have learned in their primary classes. This will help students gain a better understanding of the applications of simple machines in real life and solidify their STEM foundation

### GLIMPSE OF TRL -2K22

