

## **PROUDLY PRESENTS**



DATE	REV. NO.	PREPARED BY	REVIEWED BY	APPROVED BY
11/17/25	1	Sindhu N	Vishal J	Hariharan R
		(RRE)	(Director)	(Chairman)
11/01/25	0	Sindhu N	Vishal J	Hariharan R
		(RRE)	(Director)	(Chairman)





# **ROBOTICA 26 – International Robotics Competition 2026**

# **EVENT NAME: WORKING MODEL**

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### 1. Event Objective:

The working model competition is to identify, promote, and showcase innovative, practical, and sustainable solutions that demonstrate scientific and technical principles. The competition aims to foster creativity, problem-solving skills, and technical knowledge among participants. It also seeks to inspire teamwork, enhance presentation skills, and solidify a culture of innovation and scientific learning among students and innovators.

#### 2. Event Details:

**Date:** January 30, 2026

Venue: VIT University, Chennai, Tamil Nadu

Registration Fee: Rs. 200 per team

Finals Registration Fee: Rs. 800 per team (applicable only for teams clearing Round 1 & 2)

**Team Size:** Maximum of 2 members per team.

### 3. Category:

Sub-Junior : Grade 3 to 5Junior : Grade 6 to 8Senior : Grade 9 to 12.

### 4. Themes for each category:

- 1. Sub-Junior (Grades 3–5) Exploration, curiosity, and simple real-life applications
  - Energy from Nature
    - ✓ How can we use sunlight, wind, or water to power small devices?
  - Healthy Living and Hygiene
    - ✓ How can technology help in keeping ourselves and our environment clean and healthy?
  - Helping Hands Assistive Tools
    - ✓ Create simple tools or gadgets that assist family members, pets, or classmates.
  - Safe and Smart Home
    - ✓ How can everyday objects be made smarter or safer for kids and elders?
  - Waste to Wonder
    - ✓ How can waste materials be transformed into useful, eco-friendly products?
- 2. Junior (Grades 6–8) Problem-solving, environment awareness, and beginner automation
  - Smart Living Solutions
    - ✓ How can we make homes, classrooms, or playgrounds smarter using sensors and technology?
  - Saving Water and Energy
    - Design solutions that help conserve water or reduce electricity consumption.
  - Road Safety and Transportation
    - ✓ How can technology help in reducing accidents or improving traffic management?
  - Community Care & Emergency Response
    - ✓ Build systems that support people in emergencies like floods, fires, or health crises.
  - Play, Learn, and Explore
    - Create learning tools or interactive games that make studying fun and engaging.





- 3. Senior (Grades 9–12) Advanced thinking, data handling, AI, sustainability, and futuristic solutions
  - AI for Good
    - ✓ How can artificial intelligence support education, healthcare, or disaster management?
  - Building Sustainable Cities
    - ✓ Design systems that promote eco-friendly transportation, waste management, or renewable energy use.
  - Smart Agriculture and Food Security
    - ✓ Explore solutions that increase crop yield, reduce wastage, or monitor soil and weather conditions.
  - Digital Safety and Privacy
    - How can technology protect individuals' data, identities, and communication?
  - Assistive Technologies for Differently-Abled
    - ✓ create innovative tools that improve mobility, communication, or daily living for people with disabilities.

#### 5. Event Format:

### 1. Round 1 – Abstract Submission (Screening Stage)

Teams are required to submit an abstract that clearly explains their idea. The abstract should effectively convey the purpose, feasibility, and uniqueness of the concept, demonstrating how well the idea is defined and how it stands out from others.

- Judging mode: Online, by a panel of reviewers.
- The template for the abstract is available at <u>Click here to Download</u>.
- The sample abstract pdf is available at Click here to View.
- Submission of the abstract will happen via google form Abstract submission link

#### 2. Round 2 – 2-Minute Video Presentation (Pre-Evaluation Stage)

Teams are required to submit a 2-minute recorded video demo or pitch of their model that clearly demonstrates its working functionality, showcases strong presentation skills, and reflects the team's seriousness and commitment to the project.

- Judging mode: Online review with a scoring sheet.
- For video guidelines kindly refer to **point number 9**.
- Submission of the Video will happen via google form Video submission link

#### 3. Round 3 – Tiered Evaluation + Poster + Demo (Quarter-Finals / Semi Finals)

Format: Like a science expo with booths

- Checkpoint 1 (Tiered Evaluation): Judges quickly check if the project works, is innovative, and has relevance.
- Checkpoint 2 (Poster + Demo): Teams present a poster (problem, solution, working principle, uniqueness, future scope) along with live demo. The sample template for the Poster is available at <a href="https://www.robotica.org.in">https://www.robotica.org.in</a>
- **Duration per team:** 3 minutes maximum.
- Judging mode: Offline, At the venue.





#### 4. Round 4 – Presentation (Finals)

Format: Teams present their working model before the Judging panel

- Evaluation Criteria: Innovation, Technical Depth, Presentation, Social Impact, Marketability.
- **Time per Team:** 3 minutes maximum.
- Judging mode: Offline, At the venue.

### 6. Robotics Competition 2026 - Final Timeline

**^** •

● Dec 30, 2025 – Last Date for Registration

• Jan 03, 2026 – Last Date for Abstract Submission

• Jan 8, 2026 – Last Date for Video Submission (2-min demo/pitch)

• Jan 10, 2026 – Round 2 results announced

• Jan 20, 2026 – Finals Registration Closes

• Jan 30, 2026 – Finals (Poster + Demo & On-Stage Presentation + Awards)

### 7. Project Construction Guidelines:

- Materials: Use sturdy and durable materials for the construction of your project. The use of materials like cardboard or thermacol is strictly prohibited.
- **Design:** Ensure that the project design is functional and durable, able to withstand practical testing and demonstrations.

### 8. Registration Process:

• Fee : Rs. 200 per team + Rs. 800 per team (applicable only for teams clearing Round 1 & 2)

• **Deadline** : Kindly refer to Point Number 6 in the same document.

• How to Register : https://www.robotica.org.in//

### 9. Video Guidelines:



### **Video Content Requirements:**

- → Team Introduction (10 seconds)
  - Name, members, and institution or school name.
- → Project Title and Problem Statement (10 seconds)
  - ❖ Title of the project and explain what problem your model solves or its purpose.
- → Working Demonstration (50 seconds)
  - ❖ Participants are encouraged to showcase their project's current stage of development, even if the working model is not fully completed. A minimum of 30% completion of the prototype or functional demonstration is required.
- → Explanation of the working principle or logic (30 seconds)
  - ❖ Describe the main idea or logic behind how your model works.
- → Conclusion and future scope (20 seconds).
  - Conclude with what your working model has achieved and how it can be developed in the future.





### • Technical Specifications:

→ Duration: 120 seconds.

→ Format: MP4. Orientation: Landscape (horizontal).

→ Audio: Clear voice, minimal background noise.

→ Lighting: Use natural light.

→ Speak confidently or use subtitles if narration is not clear.

### Editing and Presentation Rules

- → Avoid excessive transitions or distracting effects.
- → Keep captions simple and relevant.
- → Do not use effects that modify actual robot performance.
- → Working demonstration should include one continuous uncut clip.

### • Submission Guidelines:

- → The final video must be uploaded to Google Drive by the participating team.
- → Ensure the video file is set to "Anyone with the link can view" under the sharing settings.
- → Copy the Google Drive shareable link of your video.
- → Paste and submit this link in the official Google Form, which will be provided on the
- → Late or inaccessible submissions will not be evaluated.
- → File name format: TeamName SchoolName.mp4.
- → Ensure the video was uploaded before the submission.
- → Last Date for Video Submission is Dec 15

### • Evaluation Criteria:

Criteria	Marks	Description	
Clarity of Concept	20	How well the project idea is explained	
Technical Implementation	20	Use of components, sensors and design accuracy	
Working Demonstration	20	Actual performance and functionality	
Innovation	10	Creativity and uniqueness of the project	
Presentation Quality	10	Video flow, clarity, and narration	
Relevance to theme	10	The idea for the project should come under the specified theme	
Team Communication	10	Team presentation and coordination	





#### Do's:

- → Record in a quiet, well-lit environment.
- → Keep the camera stable (use tripod or stand).
- → Test the robot thoroughly before recording.
- → Ensure smooth narration and demonstration flow.

#### • Don'ts:

- → Do not exceed the specified time limit.
- → Do not use copyrighted music or content.
- → Do not add irrelevant commentary.
- → Do not edit or digitally enhance robot performance.

### 10. Abstract submission form & guidelines:

- Kindly keep the maximum slides limit up to seven (7). (Including the title slide)
- Try to avoid paragraphs and post your idea in points /diagrams / Infographics /pictures
- Keep your explanation precise and easy to understand. Ideas should be unique and novel.
- Use only the provided template for making the PPT without changing the idea details pointers (mentioned in previous slides).
- Save the file in PDF and upload the same on the portal and the PDF is not more than 5 MB.
- No PPT, Word Doc or any other format will be supported
- Abstract submission link

#### 11. Video submission form:

Video submission link

#### Contact Information:

For any queries or additional information, please reach out to robotica26@otomatiks.in

We highly encourage students and robotics enthusiasts to participate in ROBOTICA 26 and showcase their talents. This is an excellent opportunity to compete at an international level and push the boundaries of innovation.

We look forward to seeing your incredible projects!

Best regards,

#### **Team Otomatiks**

Robotica-26 Planning Committee

Contact: +918148518703

Email: robotica26@otomatiks.in