





Date: 01/04/2024

## WRO 2024 National Competition- OMAN

#### 1- Introduction

Based on the number of registered teams for National Competition, we will hold a qualification competition and the best teams will receive a permit to participate in the WRO 2024- Türkiye, Izmir.

### 2- Age Groups

AGE GROUP/ CATEGORIES	AGE	2024 SEASON- BORN IN YEARS	
ELEMENTARY	8 – 12 Years Old	2012	2016
JUNIOR	11 - 15 Years Old	2009	2013
SENIOR	14 – 19 Years Old	2005	2010

For participation in the international WRO final it is strictly enforced that participants cannot, at any time in the year of the competition, be older than specified in the age group definitions. The maximum ages reflect the age that the participant turns in the calendar year of the competition, **not** his/her age at the competition day.

## 3- Different Categories in National Competition



## Robo Mission

Age: Elementary: 8-12 | Junior: 11-15 | Senior: 14-19

Team size: 2-3 people guided by a coach

Hardware: LEGO® based

Software: Free choice

Maximum size: Max. 25 x 25 x 25 cm

Characteristics: Build and program a robot that solves challenges on a field.

WRO® RoboMission is a challenge-based competition. Students must design, construct and program an autonomous robot that can solve specific challenges on a field. Because the field is set up randomly each round, the robot needs to be able to make its own decisions during the run. All parts of the robot, including controller, motors and sensors must be from LEGO® (MINDSTORMS® NXT or EV3, SPIKE PRIME or Robot Inventor).

For all specific rules and regulations refer to the General Rules for this category.

Note: WRO RoboMission was called Regular category until 2021.









# Robo**Sports**

**Age:** 11-19

Team size: 2-3 people guided by a coach

Hardware: LEGO® based

Software: Free choice

Maximum size: Max. 20 x 20 x 20 cm

Characteristics: Teams design 2 robots that compete with robots of another team.

With the WRO® RoboSports category we introduce a fun and exciting game where two teams each have two autonomous robots on the field playing a sports game. The robot needs to be built from LEGO® materials, including controller, motors and sensors (MINDSTORMS® NXT or EV3, SPIKE PRIME or Robot Inventor). In addition, teams use a camera of their choice. The game changes every 3 or 4 years and the current game is Double Tennis. Each year little changes are introduced to motivate the students to keep on developing their robots.

For all specific rules and regulations refer to the **General Rules for this category**.

Note: WRO RoboSports is replacing WRO Football as of 2022.



## **Future Innovators**

Age: Elementary: 8-12 | Junior: 11-15 | Senior: 14-19

Team size: 2-3 people guided by a coach

Hardware: Free choice\*
Software: Free choice

Maximum size: Must fit in 2x2x2m booth

Characteristics: Develop a robot project that helps solve real world problems.

(\*) Teams at WRO International Final have the option to win the LEGO Education creativity award if they mainly LEGO branded controllers.

Our Future Innovators category is a project-based competition. Students create their own innovative intelligent robotics solution relating to the current theme of the season. There is no restriction on the use of materials. This includes free choice of controllers, motors, sensors, etc. Teams will present their project and their robot model to a group of judges on the competition day. The judges will not only grade the robot solution but will also look at aspects of innovation and entrepreneurship.

For all specific rules and regulations refer to the General Rules for this category.







#### Note: WRO Future Innovators was called Open category until 2021.

#### **WRO Kids**

- This category is not the official WRO category for final International.
- We offer this category for students 6 to 9 years old in the National Competition.
- The games and rules are available on www.roboticktick.com
- The students in this age group can only use Lego WeDo 2.0, or Lego Spike Essential.

#### 4- Team Definition

- Competitions in WRO are team based. A team consists of two (2) or three (3) team members.
- Each team is assisted by a coach. For the International Final the coach needs to be at least 18 years old.
- One (1) coach and one (1) team member is not considered to be a team and cannot participate.
- · Any student may participate in one team only!

## 5- Playing Field & Booth Dimensions

- All playing field dimensions are mentioned in the General Rules for each category.
- Make sure the table matches the dimensions of the field mat as well as possible. If inside table dimensions exceed mat size, then note the guide in the category rule documents on how to place the mat inside the table.
- All RoboMission and RoboSports games are carried out on a field mat provided as a downloadable file from the WRO website and the social platform for National Organizers (www.roboticktick.com).
- The Future Innovators teams must present their model in a 2m x 2m x 2m booth. At the international final, it is enforced that teams place nothing outside their booth.

### 6- Registration

To register your team please visit the following website, and fill in all the required fields, and click on the submit button:

https://www.roboticktick.com/wro/season/7/2024

Coaches can collect all the information and files, to do the registration of their team.

For ease of work, it is better that one person registers each team, and coaches are the best choice.

Don't forget to take a nice picture of all the team members together and upload it when registering.







### 7- Important Dates

April 1 <sup>st</sup>	Start Registration Teams	
May 10 <sup>st</sup>	End Registration Teams	
June 1 <sup>st</sup>	National Competition of <b>OMAN</b>	
September 25 <sup>th</sup> ~ 28 <sup>th</sup>	Open Championship Italy	
November 28 <sup>th</sup> ~ 30 <sup>th</sup>	Final International WRO 2024 TÜRKIYE	

Note: The Location of National Competition of Oman is Cheltenham Muscat School.

## 8- Registration Fees

Registration Fee per team: 9 OMR

Please one of the team members / parents pay the entire team to the following account number. The receipt must be uploaded in the relevant section when registering.

## Name: Prosperity Tower Information Technology L.L.C

Bank Name: Sohar International

Account Number: 023020012810

If you have any questions, please contact us.

You can check the National Organizer of your country, on the following website:

https://wro-association.org/about-wro/association/member-countries

Best Regards,

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