

**WORLD ROBOT OLYMPIAD**  
**'GOOD TO KNOW'**  
*for*  
**TEAMS**  
*at the*  
**FRIENDSHIP INVITATIONAL**  
**COMPETITION**  
*in*  
**HUNGARY 2022**

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## Before the Competition

### After Registration for the Event

After the team registered they will constantly receive important information and updates regarding the event via email. Please remember to check your Spam folder from time to time to make sure you don't miss out on anything. To be on the safe side please add the following email addresses to your contacts list:

- [wro@edutus.hu](mailto:wro@edutus.hu)
- [jf@wro.hu](mailto:jf@wro.hu)
- [mp@wro.hu](mailto:mp@wro.hu)
- [ezs@wro.hu](mailto:ezs@wro.hu)
- [judge@wro.hu](mailto:judge@wro.hu)

**In case you have any questions** please contact us at:

- [ezs@wro.hu](mailto:ezs@wro.hu) – organizing, registration, invoices
- [judge@wro.hu](mailto:judge@wro.hu) – rules, scoring, judging

To make sure we can identify you and your team, please **always include the name of your team** in your email!

You are not sure how to interpret some of the rules or you want to make sure you are aware how rules are applied at the Friendship Invitational event? **From time to time please check out the Questions and Answers (Q&A) section** here:

*Link coming soon*

Each coach will receive documents (consent form, Ethics Code etc.) to sign and send back or upload via email. Please make sure to keep to the deadlines in those emails so we will have all the important documents from you in time!

### Team Member Changes

We are well aware that sometimes life makes it difficult to hold a team together and some team members need to be replaced. We do not ban changes regarding the team members, all you have to do is to send us an email with the following information:

- name of the team
- name of the coach
- name of the team member who will not participate at the Friendship Invitational
- name, birth date, email address of **team member who will participate** at the Friendship Invitational

We have only one rule for substituting team members: **at least one original team member has to stay in the team, so all team members cannot be changed!**

### Online Coach Meeting

An **online coach meeting** will take place before the event.

Date: **22<sup>nd</sup> August 2022** (Monday)

Time: **18:00** (CET Budapest)

Link: <https://meet.google.com/emn-oref-ybt>

## About the Competition Day

What **you should bring** with yourself to the event:

- Lego robotics set (it can be assembled – see Q&A)
- extra battery
- spare parts for the robot
- laptop or tablet which is used for programming (do not forget that mobile phones will not be allowed inside the competition area)
- cable to connect the robot controller with the tablet or laptop (Bluetooth or WiFi connection will not be allowed)

What **you should NOT bring** with yourself to the event:

- game mat (although the rules do not specifically ban them, but we cannot assure you that there will be space for you to use your own mat)
- extension cords for electricity

### Arriving at the venue

When the team arrives at the venue they will have to sign a registration form and anyone accompanying them without pre-registration has to register themselves also. The coach will receive a registration package with the badges and food tickets.

When team members enter the competition area judges will check and make sure that they are not bringing any unwanted equipment inside the area (e.g. mobile phone, glue, non-LEGO building material etc.). **We strongly advise coaches to collect all items and equipment that are not allowed inside the competition area!**

### The Competition Area for RoboMission and RoboSports

Every team will have one table and two or three chairs (depending on size of the team) at their disposal where they can build, rebuild and program their robot. Also they will have electricity to power their equipment. **Competition area for RoboMission and RoboSports categories will be separated from all other areas of the venue** with a cordon and will only be accessible by:

- team members competing in RoboMission and RoboSports,
- judges,
- volunteers,
- organizers,
- VIP guests,
- press,
- photographers,
- coaches only during coaching time.

During competition time team members will eat their meals inside the competition area at their designated tables. Competitors inside the competition area will have their own designated toilet facilities they can use which is also separated from the other areas of the venue.

## The Competition Area for Future Innovators

For team in Future Innovators category we will provide a 2 x 2 x 2 meter booth with a table and two or three chairs included (depending on size of team). The competition area for Future Innovators category **resembles an exhibition area** which is free of access for everyone. Coaches can be present at their team's booth and help with preparations but we strongly advise them to only help as much as needed (lifting heavy items, reaching high spots etc.). It is coaching time all the time for Future Innovators so their category schedule will not have any designated coaching times.

## Coaching Time for RoboMission and RoboSports

This is an approximately five minute time frame in which the coaches are allowed to enter the competition area. You will find a ten minute slot for this in the agenda, but **the actual conversation between coaches and teams will take five minutes**. During this time coaches can speak to their team(s), give advice, raise the moral of team members and talk about strategy. Coaches should not do any building, rebuilding or programming. In order to prevent any breach of rules **we will ask all teams to close their laptops or switch off their tablets before the coaching time starts**. The final agenda will reveal the number of coaching times at the Friendship Invitational event. Apart from the dedicated coaching times coaches are not allowed to enter the competition area or communicate with competitors inside the competition area in any way without the consent and permission of a judge (e.g. if team members need food or drink from outside).

## Surprise Rule at the Friendship Invitational for RoboMission

The surprise rule will be announced on the morning of the 3<sup>rd</sup> day (Saturday) of the competition. The surprise rule will be an addition to the base challenges and will offer extra points for the teams. The surprise rule will not be mandatory to do for the teams but in case it involves a new game object, teams will not have the option to refuse placing the new game object on the game field.

## Extra Challenge at the Friendship Invitational for RoboMission

The extra challenge will be announced on the morning of the 4<sup>th</sup> day (Sunday) of the competition. The base challenges and the surprise rule will become obsolete once the extra challenge is announced, therefore on the final day points can only be scored if the teams do the extra challenge tasks. **During the final day there will not be any designated robot run times, teams will have to make sure to ask the judges for an official scored robot run themselves within the given time frames**. Teams can do all their robot runs from 9:30 – 12:00, however

- they have to queue up to do their 1. robot run until 10:30,
- they have to queue up to do their 2. robot run until 11:15,
- they have to queue up to do their 3. robot run until 12:00.

Meantime it is practice time for every team from 9:30 – 11:40, but if any teams stand in the queue saying they want to do an official scored run, they will have priority to be next in line. From 11:40 – 12:00 practice stops, and all teams can do their 3. robot run (if they haven't done it previously).

## Judging at the Future Innovators Category

Teams in Future Innovators category will have a whole day to assemble their exhibition at their booths on the 2<sup>nd</sup> day of the competition (Friday). First day of official judging will be on the 3<sup>rd</sup> day (Saturday) when each team's booth will be visited by one or two pairs of judges. A visit plan will be provided for the teams on the 2<sup>nd</sup> day so that they can prepare for the arrival of judges in time. On the 4<sup>th</sup> and final day of the competition (Sunday) Future Innovators teams will have an easier day with no judging done.

## Ranking and Announcement of Results

RoboMission teams will have three official robot runs on the 3<sup>rd</sup> day of the competition (Saturday) trying to achieve as many points as possible with the base challenges and the surprise rule. The two highest scored robot runs from the 3<sup>rd</sup> day will be considered to determine the final ranking. Teams will have three official robot runs on the 4<sup>th</sup> day of the competition (Sunday) trying to solve the extra challenge for that day. Also the two highest scored robot runs from the 4<sup>th</sup> day will be considered to determine the final ranking. The scores of the abovementioned best four (2+2) robot runs will be added to determine the ranking.

Future Innovators category teams will have more than one rounds of presentation for the judges, most likely for a different panel of judges each time. The final scoring will be determined by the whole panel of Future Innovators judges based their combined experiences.

RoboSports teams will have two practice and three scored games against each other. The points awarded by the outcome of the scored games (win = 3 points, tie = 1 point, lose = 0 points) will be summed up and the sum will determine the ranking of the RoboSports teams.

## Agenda for the 2022 Friendship Invitational competition

	Time	Program
<b>1<sup>st</sup> September 2022 - Thursday</b>		
Everyone	14:00 – 19:00	Arrival at Danubius Hotel Annabella
	19:00 – 20:30	Dinner at the hotel
<b>2<sup>nd</sup> September 2022 – Friday</b>		
Everyone	07:00 – 09:00	Breakfast at the hotel
	09:30 – 10:00	Transfers from the hotel to the venue
	10:00	Venue opens
	10:00 – 12:45	See category schedules
	12:45 – 14:00	Lunch
	14:00 – 15:30	See category schedules
	15:30 – 16:00	Opening ceremony
	16:00 – 18:00	Friendship Challenge
	18:00 – 18:30	Transfer from the venue to the hotel
	19:00 – 20:30	Dinner at the hotel
RoboMission & RoboSports	10:00 – 10:30	Judge meeting 1.
	10:30 – 12:45	Practice time
	12:45 – 14:00	Lunch
	14:00 – 15:00	Practice time
	14:30 – 15:00	Judge meetings
	15:00 – 15:15	Robot check – (robots stay on the robot check table until the next day)

Future Innovators	10:00 – 12:45	Building time
	12:45 – 14:00	Lunch
	14:00 – 14:30	Judge meeting
	14:00 – 15:15	Building time
<b>3<sup>rd</sup> September 2022 - Saturday</b>		
Everyone	07:00 – 08:00	Breakfast at the hotel
	08:00 – 08:45	Transfer from the hotel to the venue
	08:30	Venue opens
	09:00 – 12:45	See category schedules
	12:45 – 14:00	Lunch
	14:00 – 16:00	See category schedules
	16:00 – 19:00	Friendship Get Together
RoboMission	08:30 – 08:50	Judge meeting
	09:00 – 09:20	Surprise rule announcement separately but for both teams and coaches
	09:20 – 10:20	Practice time
	10:20 – 10:30	Robot check
	10:30 – 10:50	1. Base + Surprise rule robot run (robots stay on the robot check table until end of coaching time)
	10:50 – 11:00	5 minute coaching time
	11:00 – 12:00	Practice time
	12:00 – 12:15	Robot check
	12:15 – 12:45	2. Base + Surprise rule robot run (robots stay on the robot check table until end of lunch and coaching time)
	12:45 – 14:00	Lunch
	14:00 – 14:10	5 minute coaching time
	14:10 – 15:30	Practice time
	15:30 – 15:40	Robot check
	15:40 – 16:00	3. Base + Surprise rule robot run (robots stay on the robot check table until the next day)
Future Innovators	08:30 – 08:50	Judge meeting
	09:00 – 12:45	1. round of judge interviews (according to preannounced schedule)
	12:45 – 14:00	Lunch
	14:00 – 16:00	2. round of judge interviews (not scheduled, randomly picked by judges)
RoboSports	08:30 – 08:50	Judge meeting
	09:00 – 10:20	Practice time
	10:20 – 10:30	Robot check
	10:30 – 11:00	1. Practice games (robots stay on the robot check table until the end of the coaching time)
	11:00 – 11:10	5 minute coaching time
	11:10 – 12:15	Practice time
	12:05 – 12:15	Robot check
	12:15 – 12:45	1. Official games (robots stay on the robot check table until the end of lunch and coaching time)
	12:45 – 14:00	Lunch
	14:00 – 14:10	5 minute coaching time
	14:10 – 15:20	Practice time
	15:20 – 15:30	Robot check
	15:30 – 16:00	2. Official games (robots stay on the robot check table until the next day)

4 <sup>th</sup> September 2022 - Sunday			
Everyone	07:00 – 08:00	Breakfast at the hotel	
	08:00 – 08:45	Transfers from the hotel to the venue	
	08:30	Venue opens	
	09:00 – 12:00	See category schedules	
	12:00 – 13:00	Lunch	
	13:00 – 13:30	Closing ceremony	
RoboMission	08:30 – 08:50	Judge meeting	
	09:00 – 09:20	Announcement of Extra Challenge separately but for both teams and coaches	
	09:20 – 09:30	5 minute coaching time	
	09:30 – 10:30	Pratice time	Opportunity to do 1. Extra challenge robot run
	10:30 – 11:15		Opportunity to do 2. Extra challenge robot run
	11:15 - 11:40		Opportunity to do 3. Extra challenge run
	11:40 – 12:00	Opportunity to do 3. Extra challenge run	
Future Innovators	09:00 – 12:00	Deconstruction of booth, free time	
RoboSports	09:00 – 09:30	Practice time	
	09:30 – 10:00	2. Practice games	
	10:00 – 11:20	Practice time	
	11:20 – 11:30	Robot check	
	11:30 – 12:00	3. Official games	