



HUNGARY 2019



TOURNAMENT INFORMATION

Dear teams & coaches,

We are looking forward to seeing you all in Hungary soon.

We want to give you some information about the tournaments at the WRO International Final 2019. Please read this information carefully.

We have exciting news about the Regular Competition. And exciting news for Football teams that do not make it to the final rounds!

We wish you a good time preparing for the event.

And remember: It is not the winning itself that counts. You will be present at this wonderful event and can meet new people from all over the world.

You are on a journey, do not forget to enjoy it!

Kind regards,
The WRO team and all the Judges and Referees.

Please note that we have done our best to present the latest information, but there can always be changes in the program or activities.

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General Information

Official Rules & Q&A

At the tournament the official international WRO Games & Rules are used.

You can find them here: <https://wro-association.org/wro-2019/games-rules/>

Don't forget that the **answers given on our Q&A page** are an official addition/clarification to the rules. Read them carefully: <https://wro-association.org/wro-2019/questions-answers/>

Ethics Code

All teams & coaches need to sign our WRO Ethics Code. When the tournament begins your team will personally give the signed Code to your Judge/Referee. This means you promise to follow the values that are important to WRO.

The Ethics Code and the do's and don'ts are attached to this newsletter.

Schedule

This year the official part of the competition will start on Friday afternoon.

For Open Category that is not a big change, there is no judging round on Friday.

Regular Category, Football and ARC will start the official building and modification time on Friday after lunch.

The complete schedule is attached to this newsletter.

Things to bring

- Your robot and your laptop of course...
- Spare parts. (Remember that in Regular Category you will need to leave spare EV3/NXT bricks with your coach.)
- An extra power block is always handy. (Hungary uses type C and F sockets, you might need an adapter, you can check here: <https://www.power-plugs-sockets.com/hungary/>)
- Your smile... ;-)

Open Category:

When you come in on Friday you first need to find your booth. Find your age group and then your team name. ;-)

You can set up your booth from Friday morning.

Remember that there are official regulations for the size of your presentation in the Rules. Read them carefully! Your presentation should not be bigger than the booth.

And remember that setting up is part of the team's work, not something your parents or your coach should do for you...

For the judging rounds on Saturday and Sunday you will get a timeslot. This way you will know at what time you can expect the judges.

After the judging round on Sunday morning it is possible that the judges want to see you another time to ask questions.

Regular Category:

On Friday morning you first need to find your table. Eight teams play at one game table and you will have your own table to build & program your robot.

Starting from 09:00 you have time to practice with your robot and see how it reacts in Hungary. You can talk to your coach or parents, but they cannot do the work for you of course.

After the lunch your robot needs to be disassembled and the official part of the competition starts. No talking to your coaches or parents during this time!

You will have building time and there will be a practice round that does not count. The Practice round is only for your team and the judges to get a first competition feeling. After that your robot stays in quarantine during the night.

On Saturday morning you cannot enter the competition area with any assembled parts. This morning the judges will explain the surprise rule to you. You will also get it on paper, with pictures. Coaches will only be included when it is necessary to translate something. The coaches and the rest of the public will also get the surprise rule. That way they know what you are doing on the field!
You will have 3 official rounds on Saturday. After that your robot stays in quarantine during the night.

NEW on Sunday!!! Regular Category 2nd Day Challenge

We are introducing a fun new Regular Category competition format: the “2nd Day Challenge”. It has been tested at the Friendship Invitational in Denmark earlier this year.

The 2nd Day Challenge will mainly test your programming skills. You will get to demonstrate your creativity by solving little surprise challenges.

On Sunday morning the Judges will explain & show the challenge to you at each game table. You will also get them on paper (in English), with illustrations. The new challenges will be easy to understand. Coaches will only be included when it is necessary to translate something.

For the 2nd Day Challenge we will use the same game mat as for the normal game. We will also use the same game elements. But we can also add something new, like we sometimes also do for a surprise rule.

So, you do not need to rebuild your robot. (But you can if you really want to...)

There will be 3 missions you can do to score points. You can do one, or you can combine them. The normal Regular rules (starting position, size, time of the run, etc.) will still count.

You have 3 hours “Test & Attempt Time”. In that time, you can think of a strategy, re-build, re-program, test and practice as much as you want.

If you feel that your robot works, you can **call a judge to make an official attempt**. The judge will score the robot run and this counts as an official score. Every team has **three official attempts** to solve the 2nd Day Challenge.

You can do an attempt any time you want.

But: Your first attempt should be done before 10:30, your second attempt before 11:30 and your third attempt before 12:30. (See the attached overview.)

We are sure that you will have fun solving this challenge with your team!

Final Ranking:

The final ranking order for Regular Category will be determined as follows:

- Sum of points from best run from Day 1 and best run from 2nd-Day-Challenge
- Sum of time from best run from Day 1 and best run from 2nd-Day-Challenge
- Points of best run from 2nd-Day-Challenge
- Time of best run from 2nd-Day-Challenge
- Points of 2. best run from Day 1
- Time of 2. best run from Day 1
- Points of 2. best run from 2nd-Day-Challenge
- Time of 2. best run from 2nd-Day-Challenge
- After that, teams are ranked the same place.

Football Category:

On Friday morning you first need to find your table. Max. seven teams play at one game table and you will have your own table to build & program your robot.

Starting from 09:00 you have time to practice with your robot and see how it reacts in Hungary. You can talk to your coach or parents, but they cannot do the work for you of course.

After the lunch your robot needs to be disassembled and the official part of the competition starts. In the Football competition coaches are allowed to give advice to the teams any time, but it is not allowed to hand over detailed specific information, flash drives or computers.

You will have building time and there will be a practice round. During this time, you can also be interviewed by the referees. After that your robot stays in quarantine.

On Saturday there will be qualification rounds. The top 16 will proceed to the Sunday Finals.

Qualification for the Top 16

Teams will be selected for finals on the following criteria, as described in the Football Rules:

- Points scored
- Goals Scored
- Goal Difference
- The winning team if the two tied teams competed against each other.
- The strongest opposition, indicated by the highest ranked teams in their group.

NEW on Sunday!!! Voluntary Mixed Doubles Football competition.

Don't be sad if you do not make it to the top 16, because we have something new!!

On Sunday you can join a "mixed doubles" competition. This competition is just for fun. And it will be a great way to meet people from other countries.

In this competition your team will work together with another team. You will use one robot from each team, and you will have them work together. This way you will play football matches against other combined teams.

The idea for this competition comes from Agnes Biborka from Hungary. Agnes is in a WRO Football team herself. At the Friendship Invitational in the Philippines last year some Football teams came up with this idea and they had loads of fun.

Agnes asked us to introduce it at the WRO International Final. She will be in Győr to help arrange this fun event.

Keep in mind: The Mixed Doubles will be a **"do-it-yourself" competition**. You will all need to work together to make it happen. We will have some referees that want to help out, but your help is also wanted.

If your team wants to sign up for this Mixed Doubles event you can do that after the announcement of the top 16 teams on Saturday.

Please note: At this moment we do not know exactly how many teams can join this event. We hope all teams that want to. But we need to check how many tables we can make available. We will make sure that you will be informed on Friday morning.

Mixed Doubles extra rules/regulations:

The current WRO Football Rules remain the same.

- Teams of Mixed Doubles are chosen randomly by draws, but will be a combination of teams from two different countries.
- Teams will have four to six human participants consisting of the original Football team members.
- Each original team is delegating exactly one robot to their Mixed Doubles team.
- The Team Captain of the Mixed Doubles team are to be chosen by the joint team from the Team Captains of the original teams, before their first game.
- Only the two Team Captains of the original teams are allowed to be near the game table.
- Teams place an extra colour coded sticker marker on their robots' handle to keep the robots apart.
- Teams will have one hour before their first game to share their knowledge and experience with each other inside the joint team, and to program their robots to communicate and cooperate.

No official prizes can be won, the Mixed Doubles competition is just for fun!!

Advanced Robotics Challenge (ARC)

On Friday morning you first need to find your table. Max. eight teams play at one game table and you will have your own space to program your robot.

Starting from 09:00 you have time to practice with your robot and see how it reacts in Hungary. You can talk to your coach, but he/she cannot do the work for you of course.

After the lunch your robot needs to be ready for inspection and the official part of the competition starts. You will have modification time and there will be a practice round. If you want, you can take your robot with you on Friday evening to work on some last details.

On Saturday there will 3 official rounds. After that the robot stays in quarantine.

On Sunday there will be 2 official rounds.

Final Ranking:

The ranking of a team is decided depending on the overall competition format as described in the Game Rules. If teams still remain tied, ranking will be determined by the procedure as described in the General Rules:

- Sum of the best attempt Saturday and the best attempt Sunday
- The best attempt Sunday
- The second-best attempt Sunday
- The best attempt Saturday
- The second-best attempt Saturday
- The third best attempt Saturday
- Time of the best attempt Sunday
- Time of the best attempt Saturday
- Time of the second-best attempt Sunday

Event Schedule

PLEASE NOTE: SCHEDULE CAN CHANGE DUE TO CIRCUMSTANCES AT THE TOURNAMENT

THURSDAY 7 NOVEMBER		
08:00	Teams arrive to the airport (Vienna (VIE) or Budapest (BUD) Airport)	08:00
02:00	Transfer for registered persons from Vienna/Budapest Airport to Győr	02:00

FRIDAY 8 NOVEMBER						
General		Open	Regular	Football	ARC	
08:30	Venue opens					08:30
08:45						08:45
09:00	Judges meeting & preparations	Setting up booths	Practice time (voluntary)	Practice time (voluntary)	Practice time (voluntary)	09:00
09:15						09:15
09:30			09:30			
09:45			09:45			
10:00						10:00
10:15						10:15
10:30						10:30
10:45						10:45
11:00						11:00
11:15			Disassemble robots	Disassemble robots		11:15
11:30	Lunch	Lunch				11:30
11:45						11:45
12:00						12:00
12:15						12:15
12:30	Booths open for public	Building time 90 mins	Building time 90 mins, including interviews with teams	Practice time 120 mins	12:30	
12:45					12:45	
13:00		13:00				
13:15		13:15				
13:30						13:30
13:45						13:45
14:00	Coach meeting	Robot Check & Handing over Ethics Code	Robot Check & Handing over Ethics Code	Practice match	14:00	
14:15					14:15	
14:30		14:30				
14:45		14:45				
15:00						15:00
15:15						15:15
15:30	Dinner at Venue	Free time	Robots in Quarantine, free time for teams	Robots in Quarantine, free time for teams	15:30	
15:45					15:45	
16:00		16:00				
16:15		16:15				
16:30	Dinner at Venue					16:30
16:45						16:45
17:00						17:00
17:15						17:15
17:30	Transfer to University: by foot or with bus (depending on weather)					17:30
17:45						17:45
18:00						18:00
18:15						18:15
18:30	Opening Ceremony					18:30
18:45						18:45
19:00						19:00
19:15						19:15
19:30	World Premiere of Documentary "Me and my Robot" - featuring WRO teams					19:30
19:45						19:45
20:00	Short walk to WRO Village / Transfer to Hotel					20:00
20:15						20:15
20:30	WRO Appreciation Party for NO & Partners (ETO Hotel)					20:30
22:30						22:30

SATURDAY 9 NOVEMBER							
General	Open	Regular	Football	ARC			
08:00	Venue open				08:00		
08:15					08:15		
08:30	National Organizer Meeting	1st Judging round, handing over Ethics Code	Surprise Rule Announcement	Measurement time	Practice time		
08:45							
09:00							
09:15				Building time 60 mins	League Matches	Robot check	
09:30				Robot Check		Round 1	
09:45		Round 1					
10:00		Building time 45 mins		Practice time			
10:15							
10:30	Lunch	Lunch	Robot Check	Lunch	Robot check		
10:45							
11:00					Round 2		Lunch
11:15					Free time		
11:30					Lunch		
11:45							
12:00	2nd Judging round	2nd Judging round	Building time 45 mins	League Matches	Round 2		
12:15							
12:30					Robot Check		
12:45					Round 3		Practice time
13:00							
13:15			Announcement of top 16		Robot check		
13:30			Robots in Quarantine, free time for teams	Robots in Quarantine, free time for teams	Round 3		
13:45							
14:00	Transfer to University: by foot or with bus (depending on weather)				14:00		
14:15					14:15		
14:30	Friendship Night				14:30		
14:45					14:45		
15:00					15:00		
15:15					15:15		
15:30					15:30		
15:45	Short walk to WRO Village / Transfer to Hotel				15:45		
16:00					16:00		
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SUNDAY 10 NOVEMBER							
General	Open	Regular	Football	ARC			
08:00	Venue open				08:00		
08:15					08:15		
08:30	3rd Judging round and come-back round	2nd Day Challenge Announcement	Football Mixed Doubles event (voluntary) 4hrs	Practice Time	08:30		
08:45		3 Attempts 2nd day Challenge	<i>Endtime attempt 1</i> <hr style="border-top: 1px dashed black;"/> <i>Endtime attempt 2</i> <hr style="border-top: 1px dashed black;"/> <i>Endtime attempt 3</i>		Measurement time	08:45	
09:00				Interview	Robot Check	09:00	
09:15				Top 16 Matches	Round 4	09:15	
09:30				Quarter Final		Practice Time	09:30
09:45				Semi Final	Robot Check	09:45	
10:00				Dismantling of booths	3rd position	Round 5	10:00
10:15					Finals		10:15
10:30					Free time	Free time	Free time
10:45		Lunch	Lunch			10:45	
11:00				11:00			
11:15				11:15			
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12:45				12:45			
13:00				13:00			
13:15				13:15			
13:30				13:30			
13:45				13:45			
14:00	Transfer to University: by foot or with bus (depending on weather)				14:00		
14:15					14:15		
14:30					14:30		
14:45					14:45		
15:00	Closing Ceremony at University				15:00		
15:15					15:15		
15:30					15:30		
15:45					15:45		
16:00					16:00		
16:15					16:15		
16:30					16:30		
16:45					16:45		
17:00					17:00		
17:15	Transfer to Vienna/Budapest (depending on flight time, etc.)				17:15		
00:00					00:00		

Plan for Sunday Creativity Booster

Regular Category 2nd day challenge

08:30 - 09:00 Challenge Announcement & Explanation

09:00 - 12:30 2nd day challenge:
Teams build & practice on their robot

12:30 2nd day challenge ends.



1st attempt

Teams should do a
first attempt
before 10:30



2nd attempt

Teams should do a
second attempt
before 11:30



3rd attempt

Teams should do a
third attempt
before 12:30

Example: first attempt can be any time between 09:00 and 10:30.

Note: If you haven't used all three official attempts by 12.30, this will result in less attempts entered into the scoring system.

The best two attempts go into the final ranking.

The WRO Ethics Code for Teams

“It is not whether you win or lose, but how much you learn that counts.”

As a team we follow these principles:

*We are participating in a competition.
We like to win. We want to learn.
And we also want to have fun.*

*We want to play fair.
We design our own robot and we write our own software.
It is not fair if someone else does that for us.*

*We can only learn if we try things ourselves.
Our coach can teach us things and guide us.
And we can also get inspired by others.*

*But our coach should not do the work for us.
And we do not simply copy a robot or software from someone else.
We use the examples we find to design our own robot and programming.*

*Sometimes we fail and that is OK.
Original ideas come from failing.
Winning is nice but failing is part of our journey.*

Team name: _____

Name & signature of Coach: _____

Name & signatures of Team members: _____

What is OK and what is not OK in World Robot Olympiad?

OK	Not OK
All competitions	All competitions
We search for information online and share ideas with other people. We learn from the examples and use what we have learned in our own robot. (hardware and/or software)	We buy a solution online or we use a direct copy of another person. We use that solution in the competition. (hardware and/or software)
Our coach/mentor/parent advises us on different ways to program things.	Our coach/mentor/parent programs the software (or parts of the software) for us.
Our coach/mentor/parent shows us different ways of constructing things.	Our coach/mentor/parent builds the robot (or parts of the robot) for us.
Our coach/mentor/parent lets us find out what to do ourselves if things don't work.	Our coach/mentor/parent fixes it for us if things don't work.
Our coach/mentor/parent lets us handle things ourselves on the competition day.	Our coach/mentor/parent discusses with the judges about the rules and decisions on the competition day.
We want to win the competition, but not by cheating or having someone else do the work for us.	We want to win the competition; it does not matter how we win it.
Regular Category	Regular Category
We try to solve the surprise rule ourselves, because we have learned all the basics and can find a solution as a team.	Our coach/mentor/parent tries to give us the instructions to solving the surprise rule after it has been announced.
Open Category	Open Category
Our coach/mentor/parent only helps us with preparing our Robot model or Open Category booth if it is needed. (For example, if things are too heavy, if we need to learn new skills, or if something is too dangerous for us to prepare on our own.)	Our coach/mentor/parent decides what our robot model and/or our booth will look like and builds things for us even if we could make it on our own.
WRO Football & ARC	WRO Football & ARC
We adapt our strategy ourselves and repair / adapt our robots ourselves.	Our coach/mentor/parent suggests or tells us how to change our strategy and repairs / adapts our robots for us.

Help us make WRO even better

WORLD ROBOT OLYMPIAD

**If you are a participant, parent or coach,
you can help us investigate the impact of WRO.**

We want to know how WRO impacts the education of young people around the world. That is why Shanghai Normal University is collaborating with us on a survey, that can help unveil the positive effects of joining a WRO competition.



You can help us by completing an online questionnaire. It will take you less time than drinking a cup of coffee:-)

The survey is available in English (and Chinese if you feel adventurous).

Access the survey with the QR code



or this link:

<https://www.wjx.cn/jq/33585769.aspx>

The survey is open until 1st of December 2019.