



HUNGARY **2019**



**EDUTUS**  
UNIVERSITY

WORLD ROBOT  
OLYMPIAD™

# WRO2019 INTERNATIONAL FINAL

First time in Europe

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Sponsorship proposal

**2019 HUNGARY**

2018 THAILAND

2017 COSTA RICA

2016 NEW DELHI

2015 DOHA

2014 SOCHI

2013 JAKARTA

2012 KUALA LUMPUR

2011 ABU DHABI

2010 MANILLA

2009 POHANG

2008 YOKOHAMA

2007 TAIPEI

2004-2006 SINGAPORE



## ABOUT WORLD ROBOT OLYMPIAD™

World Robot Olympiad™ started in 2004. According to its mission statement, it aims to bring young people from all around the world together to develop their creativity, design and problem-solving skills through challenging and educational robot building competitions and activities.

WRO™ was started to promote robotics to young people all around the world. By learning more about robotics, we hope to draw young people's interest towards STEM (Science, Technology, Engineering, and Mathematics) subjects and inspire the innovators of tomorrow. WRO™ is a truly global contest dedicated to science, technology, and education with challenging and educative robotics competitions. Using creativity, inventiveness and a methodical approach to problems they develop the skills needed to address any situation.

What people find the most interesting is that each year the different challenges focus on real world problems. Everything, like finding sustainable solutions for climate change or protecting biodiversity or inventing methods for precision farming and preventing wasting food, can be related to the life that our teams know.

WRO™ tournaments are organized in more than 60 countries and each season new countries join the contest. Top teams from the national rounds earn an invitation to the World Championships International Final held in every November and hosted by different countries.



# HUNGARY 2019

# ABOUT EDUTUS UNIVERSITY

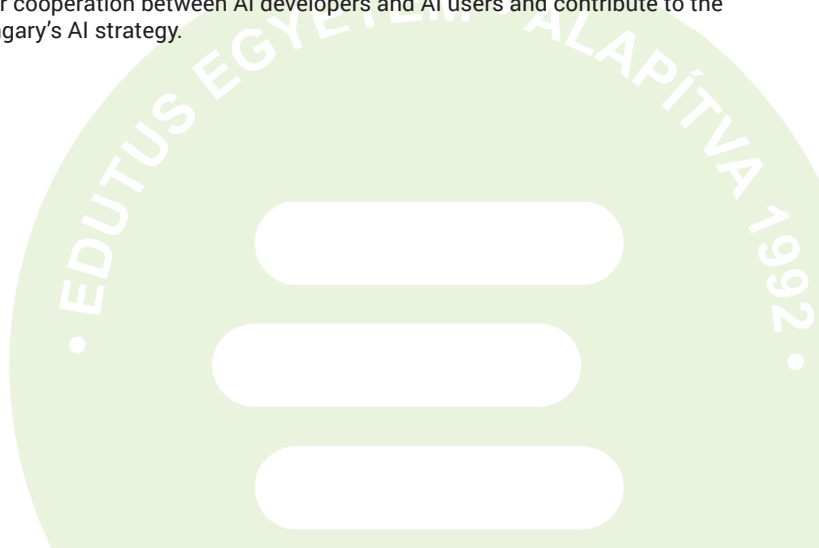
Edutus University was established in Tatabánya in 1992. Edutus is a student-oriented college with students and teachers having a close and personal relationship. Edutus became a university of applied sciences in 2018.

As a non-state-owned higher educational institution recognized by the Hungarian Accreditation Committee we do our best and provide our fresh graduates excellent chances in the labor market. With our constantly renewing offer of specializations in our training programs (e.g. castle tourism, SSC specialist, content marketing, innovative businesses, e-business, facility management, and laser technologies) we provide our students with knowledge and competences which can be directly utilized in practice. By launching dual study programs in 2017 we further strengthen the practice-oriented approach which has always characterized the University.

Edutus also places great emphasis on encouraging young people to be interested in the STEM fields, as well as on talent fostering. An outstanding tool to do this is to organize robot programming competitions. Edutus is the regional organizer of the international First Lego League™ and won the right to be the national organizer of World Robot Olympiad™. Hungary will be the first European country to host the WRO™ Final, between 8-10 November 2019.

With support from the Erasmus program, Edutus has more than 50 foreign partners, and the number of foreign students studying at Edutus in the framework of the program increases year by year. We organize our International Week annually, where 6-8 visiting professors hold different courses, in which our students, and students of our foreign partners can participate.

Edutus University has also signed the Founding Declaration of the Artificial Intelligence Coalition initiated by the Ministry of Innovation and Technology to join other industry players at the formal signing event on 9 October 2018. The AI Coalition aims to provide a permanent forum for cooperation between AI developers and AI users and contribute to the development of Hungary's AI strategy.



# ABOUT THE WORLD FINAL

When?

8 November - 10 November 2019

Where?

Olympic Sport Park - 9025 Győr, Radnóti Miklós utca 46.

When we first organized the contest in Hungary in 2014, only 11 teams participated. The number of teams increases year by year and 116 teams registered and participated in the 2018 Hungarian national final. As we would like to increase this number next year, Edutus University will contact more than 800 state schools, foundations, private schools and universities. We would like to reach 300 teams participating in the national rounds and expect 100 teams to qualify for the national final.

The 6th WRO™ national final will be held in June 2019 in Földi Imre Sports Hall, in Tatabánya, Hungary. We plan on expanding the competition in Hungary, and already started negotiations with the Hungarian government about the opportunities. World Robot Olympiad™ is considered to be a study competition since 2017. The regional rounds are planned to be organized in 20 different venues across Hungary to reach more young people between the ages of 8 and 25, interested in math, informatics and science. We believe that the competition combines the thrill of a sporting event with the challenge of designing, building and programming LEGO® Mindstorms robots.

Let's bring together young people from all over the world to have fun and compare their skills at this year's international final!

Theme of WRO2019: Smart Cities.



# CATEGORIES

## REGULAR

**Ages:**  
WeDo (10 and under)  
Elementary (12 and under)  
Junior (13 to 16)  
Senior (16 to 19)

## OPEN

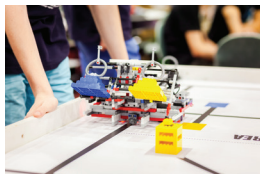
The Regular Category is a challenge-based competition. Students must design, construct and program their robots to solve specific challenges on a pre-defined field. Points are scored for completed tasks. The main part of the challenge changes to suit the actual theme of the competition and is structured in a way that each age category faces an appropriate level of difficulty. To make the competition fair, the robot must be reassembled on the day of the competition when there is also a surprise rule change that the teams must adapt to. For Elementary and Junior age groups only LEGO® RoboLab, NXT and EV3 software are allowed. In the Senior age group, any software and any firmware can run on NXT / EV3 controllers

The Open Category is a project-based competition. Students create their own intelligent robotics solution relating to the current theme of the season. Teams present their project and their robot model to a group of judges on the competition day. With the same three age classifications as the Regular Category, and the same team sizes, the Open Category relies much more on teams' imagination and ability to present their ideas before an audience. Everyone has access to a 2x2x2 meter booth in which they have to present their research and a robot model in response to the year's challenge. Free choice of programming language / software. Teams are encouraged to come up with creative, unusual responses which show how robotics can be used to solve a particular problem.

## FOOTBALL

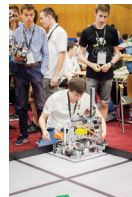
**Ages:**  
10 to 19

This category is open to participants aged between 10 and 19. Teams should be between two and three members. Each football team must consist of two autonomous robots and although there are small changes to the rules each year, the aim is always to score more goals than the opponent. Robots must be reassembled on the day of the competition. Two teams, with two robots per team, play head-to-head Soccer on a proscribed "field." The Soccer Ball has an infrared (IR), pulsed signal. Robot players navigate to the ball using IR sensors. Robot players navigate the colored "field" using light sensors.



**Ages:**  
17 to 25

Designed for students aged 17 to 25, this category is designed to give students' engineering and programming skills the ultimate test. In 2015 and 2016 there was a bowling competition and in 2017 and 2018 a Tetrastack challenge which saw the robots compete to sort and then slot blocks into a stack. The challenge is to make a robot that can score as many points as possible in a robot version of the Tetris® game called Tetrastack. The robot will locate, identify, and stack interlocking colored shapes called tetracubes within the Stacking Form – a rectangular upright box. The rules change according to advice from WRO® experts to provide a challenge and create a test of each team's skills and ingenuity.



# HUNGARIAN WORLD FINAL IN NUMBERS



3,500 participants



More than 60 countries



2,600 team members



More than 500 qualified teams





































1,000 volunteers and judges



23,000 teams worldwide

# SPONSORSHIP LEVELS

	PLATINUM	GOLD	SILVER	BRONZE
<b>Media:</b> logos will be displayed in WRO 2019 host country advertisement.				
<b>WRO2019 website:</b> All sponsors will be introduced on the official website of the competition				
<b>Company promotion in WRO2019 Final booklet:</b> e.g.: a product ad – or company profiling.	 (1 page)	 (0,5 page)		
<b>Logo in International WRO2019 final booklet:</b> Logos will be displayed with specific mentioning of level of sponsorship.	 (Large)	 (Medium)	 (Small)	 (XSmall)
<b>Logos displayed at WRO2019:</b> All sponsors will have their logos displayed at the event with clear mentioning of the level of sponsorship.	 (Large)	 (Medium)	 (Small)	 (XSmall)
<b>Sponsor Award:</b> An award given to one team. Ex. Innovation Award or Creativity Award.				
<b>Message at opening ceremony:</b> 2 minutes speech addressing the audience.				
Logo on stage backdrop.	 (Large)	 (Medium)		
<b>Exhibition area at international WRO2019 final:</b> Presenting the company and display products/services, different booth sizes.	 (Large)	 (Medium)	 (Small)	 (XSmall)
<b>Video interview:</b> Presented on WRO2019 websites, YouTube and Facebook.				
<b>WRO2019 Newsletter:</b> Message to teams, who participate in WRO2019 Final.				
<b>Social media messages:</b> Facebook, Instagram and Twitter.				
<b>VIP access:</b> You will have a VIP pass and special access to a VIP lounge to meet and discuss.	 (unlimited)	 (5)	 (2)	 (1)
<b>Value of sponsorship (minimum) in USD</b>	<b>\$200.000</b>	<b>\$150.000</b>	<b>\$100.000</b>	<b>\$50.000</b>



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Our goal is to reach as many Hungarian teams as possible who can represent themselves at the 2019 Hungarian World Final. We would like to inform young people in the age group from 10-25 years, teachers and parents to be informed while ensuring that the participants are well equipped for the competition. Registered teams compete in the national final with their robots and according to the qualification quota, the best teams qualify themselves for the world final, where they can compare their skills with other teams from 65 countries.

**Be part of an exciting competition  
and support WRO™ Hungary. Organize an  
unforgettable event together!**



[www.wro.hu](http://www.wro.hu)



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[/WROHungary](https://www.instagram.com/WROHungary)

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