

Did you know?

- 80%** In the next decade, 80% of jobs will require math and science skills
- 6.5%** There are over 9 million jobs in science, technology, engineering and mathematics in the USA
- 24%** STEM Occupations grew by 24% over the past decade in the United States
- 29%** STEM workers earn 29% more than their non-STEM counterparts

5 Reasons to get involved in the WRO

- Improve cognitive, fine motor, social behaviors, and sportsmanship
- New opportunities for creative and critical thinking
- Safe introduction to technology
- Hand-on lessons with real-world applications
- Fun and inspired learning

We thank all partners and volunteers who are committed to our association and the WRO each year.

JUNIPER NETWORKS | **Engineering Simplicity**



World Robot Olympiad Code of Ethics

From the beginning, the aim of the World Robot Olympiad Association is to help young people develop their creativity and problem-solving skills. The WRO has set the following main goals:

- ⚙ To give young people the opportunity to learn skills that are relevant in the 21st century, such as creative and innovative thinking
- ⚙ To motivate young people to become our scientists, engineers and inventors of tomorrow
- ⚙ To show young people the exciting world of automation and (robotic) technology
- ⚙ To show a connection between modern technologies and their use in educational institutions
- ⚙ To promote the use of robots in MINT education (mathematics, informatics, science, technology)
- ⚙ To give young people from all over the world a chance to prove their skills in competitions with fun & teamwork

CONTACT US

P.O. Box 442, Medford, MA 02155

Email: jeannette@wro-usa.org

Website: semiaoutreach.org

 facebook.com/SemiaUSA

 twitter.com/SemiaUSA



MASSACHUSETTS & CONNECTICUT





What is the WRO™

World Robot Olympiad

Starting in 2004, World Robot Olympiad™ has developed to a truly global competition. WRO™ tournaments are organized in more than 70 countries and each season new countries join the movement. Every November the WRO™ hosts the International final in a different country.

How to Participate in WRO™

- Be between 6 and 19 years old
- Have 2 or 3 teammates with an adult team coach
- Choose team name
- Register your team to compete in a WRO competition
- Have a LEGO MINDSTORMS EV3 Set or WeDo set
- Meet once a week to practice for the competition
- Participate at a competition

Age Group	Regular	Open	Football
6-10 WeDo	✓	✓	
8-12 Elementary	✓	✓	
13-15 Junior	✓	✓	
16-19 Senior	✓	✓	
10-19 Football			✓



Regular Category

- Solves current theme tasks on a course with a LEGO® robot
- Individual course for every age group
- Robot must be reassembled at the competition
- Any programming language is allowed for 16-19 years



Open Category

- All age groups build a robot model using current theme
- Separate scoring for each age group
- Free choice of building materials and programming languages
- Judges evaluate presentation on competition day



Football Category

- Playing football with two LEGO® robots per team
- Infrared ball and compass sensors allow orientation on the field
- Robot must be reassembled at the competition
- Any programming languages is allowed



WeDo Category

- Introduced in 2018 for ages 6-10 years old
- Uses the LEGO Education WeDo Core Set with any number and combination of controllers, motors and sensors allowed.
- Regular Category Robot must be reassembled at the competition

WRO™ 2019 Season

January 15, 2019

The WRO announces the new game theme and releases the game rules

January 15 - May 30, 2019

Team registration begins for Massachusetts & Connecticut Nationals Qualifier
Teams agree to weekly meeting to build and program their robot for competition

January 19, 2019

Massachusetts & Connecticut kick-off and informational meeting.
Location To Be Announced

June 15, 2019

Summer kick-off
Location to be Announced

August 10, 2019

Massachusetts & Connecticut Nationals Qualifier, James L. McKeown Boys & Girls Club of Woburn
Qualifying teams are invited to Nationals

September 13-14, 2019

Qualifying teams attend Nationals
Location to be Announced

November 8-10, 2019

Teams from over 65 countries compete in the three-day WRO World Final in Hungary



Regular Category 2018 1st place winners
Sushi Bots from Glastonbury, CT