WRO-USA 2014 National Championship

Saturday, September 27, 2014, 8am – 4:30pm

Don Ridler Field House

Lawrence Technological University, Southfield, Michigan

Organized by Lawrence Tech University Robofest

Qualified teams will advance to WRO Final in Sochi, Russia

Regular Elementary "Rocket" Teams (14) – 2 teams will be qualified

Team Name	Organization	City	State	Coach
NanoBots	Stoller Middle School	Beaverton	OR	Nixon Xavier
Booyah!	Kennedy Middle School	Cupertino	CA	Chaya Murthy Govindaraju
Minibots	Wheatlands Elementary	Aurora	IL	Praveen Puri
The Aurora Borealis	Chasewood Learning	Aurora	IL	SUJIT Naidu
The Instigators	Laude Christian School	Aurora	IL	Carol Rinker
Hyperdrive Grenades	LEGO Robotics Chasewood	Aurora	IL	Sandesh Parimi
Cranbrook 1	Cranbrook Schools	Bloomfield Hills	MI	Betsy Lamb
Cranbrook 2	Cranbrook Schools	Bloomfield Hills	MI	Betsy Lamb
3Volution	3Volution	Novi	MI	Srinivas Bommidi
RoboGeek	Troy Robotics Group	Troy	MI	Smita Basarkod / Rita Malik
Bionic Lancers	BHMS	Bloomfield Hills	MI	Jas Mann
Mindstorms Madness	Hillside Middle	Northville	MI	Andrew Brown
Happy Troop	Novi Meadows	Novi	MI	Kevin Hsieh
Bruins	Bethany Christian School	Rochester Hills	MI	Joshua Brudnak

Regular Junior "Sputnik" Teams (2) – One team will be qualified

APOLLO 13	robomindtech	Fresh Meadows	NY	Dennis Chan
APOLLO 14	robomindtech	Fresh Meadows	NY	Dennis Chan

Demonstration Teams (3) – Qualified if the demonstration is successful

Category	Team Name	Organization	City	State	Coach
Regular College	LTU	Lawrence Tech University	Southfield	MI	CJ Chung
Regular Senior	TEAM KISS	robomindtech	Fresh Meadows	NY	Dennis Chan
GEN II Football	Rockin' Robots	Home school group	Tuckahoe	NY	Afshin Bayrooti

Open Category Teams (11) – One Sr or Jr; One Elementary teams will be qualified

Category	Team Name	Organization	City	State	Coach
Senior	APOLLO 17	robomindtech	Fresh Meadows	NY	Dennis Chan
Senior	Quasimotor	Farmington Harrison High Robohawks	Farmington Hills	MI	Barry Brouillette
Senior	RoboCrusiers S	RoboCruisers	Canton & Northville	MI	Wei Liu
Junior	Potato	Munger School	Detroit	MI	Tiwanya Robinson
Elementary	Los Rancheros	Munger School	Detroit	MI	Shangaleza Robinson
Elementary	STEOTW	PCA	Plymouth	MI	Doug Chubb
Elementary	The Martians	MARSH	Westland	MI	Francis Feraro
Elementary	Robogirlz	N/A	Lake Orion	MI	Jane Tarakhovsky
Elementary	the Green Team Inventors	Homeschool	Hamtramck	MI	Karl Braunschweig
Elementary	Artemis Rising	Cranbrook Schools	Bloomfield Hills	MI	Betsy Lamb
Elementary	RoboCrusiers E	RoboCruisers	Northville & Canton	MI	Wei Ding

Announcements

- 1 Elementary, 1 Jr, and 1 Sr. Table will be used for competitions. 1 Elementary Practice Table will be setup
- Regular Elementary rule updates/clarification
  - in case of rerun, completion time will be recorded
  - #2 item on the scoring sheet: if at least **over 50%** of a Rocket Element is placed over Ramp, you will get 10 points
- Concession for breakfast and lunch is available

Regular Category Judges

- Elementary: Mike Dobbyn, Chris Parker, Levi White, and Icaro Gargione
- Junior/Senior: Dennis Chan and William Wong

Open Category Judges

- Javier Alcazar, Ph.D., IEEE Robotics and Automation Society, Southeast Michigan Section Chapter Chair
- Gaurav Pandey, Ph.D, University of Michigan, Ann Arbor; IEEE member
- G. Edzko Smid, Ph.D., President, iTrack LL; IEEE Member
- Stan Baek, Ph.D., Electrical and Computer Engineering Department, University of Michigan, Dearborn; IEEE member
- Kun Hua, Ph.D. Electrical and Computer Engineering, LTU; Faculty Advisor, LTU IEEE Branch
- Philip Olivier, Ph.D., LTU ECE Dept. Chair, IEEE member
- Claus Ditlev Christensen, M.Sc., Secretary General, World Robot Olympiad Association
- Afshin Bayrooti, Ph.D. Mathematics, MD JPMorgan Chase & Co
- Chris Cartwright, Ph.D., Math and Computer Science Department, LTU – Judging coordinator

IEEE Advancing Technology for Humanity

IEEE Robotics & Automation Society

About WRO

WRO is a global LEGO Robotics competition. It is an event that brings young people from all over the world together. Teams of youngsters get the opportunity to learn more about STEM and develop their creative and problem solving skills through various robotics challenges. This year 49 countries with nearly 20,000 teams are participating in this event. Each participating country has its own competition and the best teams are invited to compete at the World Robot Olympiad. The Olympic city Sochi, Russia is hosting final WRO in November 2014. Lawrence Technological University Robofest Office (www.robofest.net) is the USA National Organizer.

Information for Qualified Teams

- Selected teams must decide the participation at Sochi by Friday October 3rd, Noon (EDT) by sending all the participant names by email at cchung@LTU.edu. If declined, the next best team may be invited.
- In addition, WRO final registration fees must be sent to LTU by Oct 25. For each participant (student, coach or judge) the fee is $150 USD. The fee includes accommodations for 2 nights, 3 meals per day, local transportation and visa support. Note that you'll be able to book extra nights. The fee for non-participants is $50 USD and for Specially Invited VIPs the fee is $100 USD. Local transportation and access to the Olympiad events and activities is included. This fee does not include meals or accommodations.
- Qualified ***Open*** Category Teams must submit a team video link as well as a written report by Oct 20, Noon, by email at chung@LTU.edu. Please read the General Rule, pages 8-9.

About Robofest

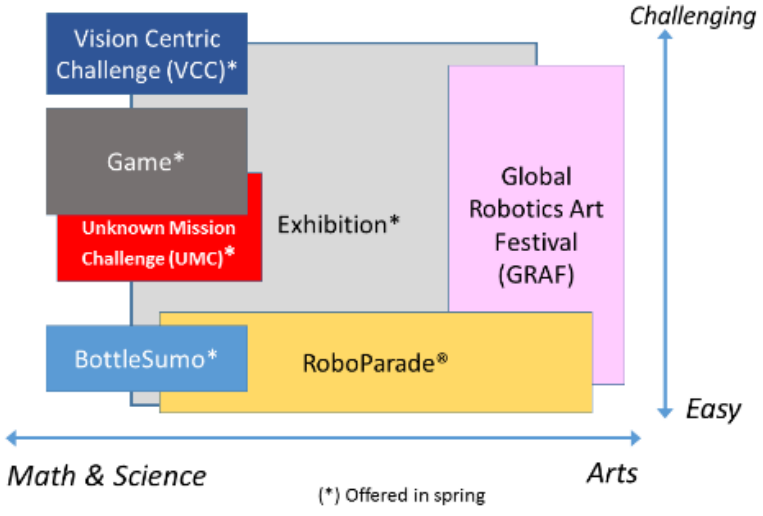
Robofest® is Lawrence Technological University's international autonomous robotics program for students in 4th grade – 12th grade and college with the following categories:

Game Putting math skills to the test, teams compete to accomplish missions using fully autonomous robots. *Junior (grades 5–8) and Senior (grades 9 –12); Intermediate–Advanced; Registration begins in December.*

Exhibition In this creative competition, students have total freedom to show off any (semi) autonomous robotics project. *Junior and High School; Intermediate–Advanced; Registration begins in December.*

Vision Centric Challenge (VCC) Develop a vision-centric robot to maneuver through an obstacle course. *College students & Senior; Advanced; Registration begins in December.*

BottleSumo Robots vie to intentionally push a bottle off a table or be the last robot remaining on the table. *Junior and Senior; Beginner*; *Registration begins in April.*



Unknown Mission Challenge (UMC) Mission tasks are unknown until the day of competition. *Junior, Senior, Intermediate–Advanced; Registration begins in April.*

RoboParade® Elaborately decorated robotic floats autonomously parade along a route in a colorful, creative display. *Grades 4–12; Beginner; Registration is* ***OPEN NOW****.*

Global Robotic Art Festival (GRAF) Robots perform, dance, make music, or paint in this interactive kinetic art and sculpture competition. *Grades 4 –12; Intermediate–Advanced; Registration is* ***OPEN NOW****.*

Schedule

Time	Events	
8:00am	Doors open to teams	
8:30am	Judge Meetings	
8:50am	Open category Coach meeting; Lottery to decide the Open category presentation order	
9:00am	Opening ceremonies and announcements: Emcee: Mr. Mark Brucki • National Anthem - Sandra Lauer • Remarks by Mr. Mark Brucki – LTU Executive Director of Economic Dev. & Government Relations • Remarks by Claus Ditlev Christensen, WRO General Secretary • Introduction of VIPs, Teams, and Judges Announcements	
	Regular Category (Elementary and Junior)	**Open Category & Demo teams**
9:25am	Unveiling of Rocket Element Groupings; Drawing a card out of 6 – Mike Dobbyn	
9:30am	Start of the assembly period for Regular teams; *No adult is allowed in the pit!*	Presentation of 7 Open Category Teams (7 min x 8 = 56 min)
10:30am	Announcement of the Warehouse Assignments for Round 1; Drawing a card out of 3 – Mike Dobbyn	Presentation of 2 Open Category Teams
10:45am	Quarantine of robots and launch facilities	
10:55am	Round 1 begins (5 min x 14 teams) After a run, the robot must be re-quarantined.	Judges will visit ALL team tables. Teams must be ready for interviews.
12:05pm	Lunch break	
12:35pm	Announcement of the Warehouse Assignments for Round 2	Presentation of 2 Open Category Teams
12:50am	Quarantine of robots	
1:00pm	Round 2 begins (5 min x 14 teams); Re-quarantined after a run	Judges will visit ALL team tables. Teams must be ready for interviews.
2:10pm	Announcement of the Warehouse Assignments for Round 3	Presentation of Regular College and Regular Senior Team
2:25pm	Quarantine of robots	
2:35pm	Round 3 begins (5 min x 14 teams); After a run, the robot must be re-quarantined again, in case of re-runs.	Open category Judges will decide winners by 3pm.
3:45pm	The end of Round 3; Judge will select winners	Demonstration of GEN II football
3:55pm	Medal ceremony and group picture	
4:05pm	Closing remarks: Dr. Tom Goulding, Math and Computer Science Dept. Chair and Andrew Watchorn, Academic Curriculum Specialist, National Instruments Award of trophies and announcement of teams advancing to WRO Final at Sochi, Russia	
4:20pm	Group Picture of teams representing the US to the WRO Final	

WRO International Sponsors

PREMIUM SPONSOR GOLD SPONSORS SILVER SPONSORS