



# LAWRENCE TECHNOLOGICAL UNIVERSITY ROBOFEST®

little robots, **BIG MISSIONS**

*A Competition Motivating Young Minds to Master the Machine*

Robofest® is a festival of competitions with autonomous robots offering students the opportunity to master principles of Science, Technology, Engineering, and Math (STEM) as well as Computer Science (CS), communication, critical thinking, teamwork, and problem solving skills while designing, constructing, and programming robots.

Since 1999, over 28,000 students have competed in Robofest, including teams from 14 US States, Brazil, Canada, China, Colombia, Ecuador, Egypt, England, France, Ghana, Hong Kong, Hungary, India, Lebanon, Macau, Mexico, Nigeria, Singapore, South Africa, South Korea, Taiwan, and UAE.

Teams compete in the junior (grades 5-8), senior (grades 9-12), and college divisions in the following broad & challenging categories:

- **Game:** Students complete annually-themed robotic missions
- **Exhibition:** Teams have complete freedom to show off any creative autonomous robotics project
- **RoboMed:** Open category for (bio) medical robotics/device projects for high school and college students
- **Vision Centric Challenge (Vcc™):** Teams develop robots to solve problems with cameras and computer vision algorithms
- **Unknown Mission Challenge (UMC™):** Mission tasks will be totally unknown until the day of competition
- **RoboArts™:** Robotics music, dance, and visual arts competition
- **BottleSumo™:** Push a bottle and/or opponent off the table
- **RoboParade®:** Parade of Autonomous robots!
- **Camps:** Hands-on workshop + Mini Competition
- **WISER:** World conference on Integrated STEM Education through Robotics (High School Students, Parents, & Teachers)

### 2019 Major Sponsors



### Unique Features of Robofest

**Look Mom, No Hands!:** Students must fully program their robots to perform their missions without human assistance. No joysticks or remote controls are allowed.

**Your Mission, If You Decide to Accept It:** Is (partly) unknown or dynamic. Students must program their robots to accomplish tasks in a dynamic environment.

**Students Only Rule:** While adult mentorship is encouraged, students design, construct and program the robots, and make all decisions during competitions without any direct adult help.

**It's Flexible:** Any type of robot kit/platform, materials, actuators, and sensors are allowed. Robots can be programmed with any programming language.

**Affordable:** Team registration is \$50 per team. Reusing parts and old kits is encouraged. Teams can be formed by any organization, school, home school, club or civic group.

**Everyone is Recognized:** All registered participants receive medals and personalized certificates. Winners of the qualifying and championship rounds receive trophies. Any participants who attend LTU can apply for a \$3,000 Annual Renewable Scholarship.

### 2019-2020 Academic Year Timeline

When	Events
Oct 1, 2019 Oct 25, 2019	Draft Rules posted at <a href="http://robofest.net">robofest.net</a> US Kick-off meetings start
Nov 2019	Rules for Spring season posted International Qualifying Competitions begin US Team Registration opens
Jan ~ Feb 2020	Free technical workshops for teams at LTU and through online webinars
Feb 15, 2020	Warm-up competition and Judge training at LTU
Feb 29 ~ Apr 18, 2020	US Qualifying Competitions
Apr 24 & 25, 2020	Michigan Invitational Qualifying Events at LTU
May 14-16, 2020	21 <sup>st</sup> World Championship at LTU, Southfield, MI

Subscribe to Robofest monthly eNews at [www.robofest.net](http://www.robofest.net)

If you are interested in Hosting a Robofest Qualifier in your country/city, please email [robofest@LTU.edu](mailto:robofest@LTU.edu)



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