



LAWRENCE TECHNOLOGICAL UNIVERSITY ROBOFEST®

Little Robots, **Big Missions** A Competition Motivating Young Minds to Master the Machine

A Competition Motivating Young Minds to Master the Machine

Robofest is a competition of autonomous robots – programmed to act independently and not remote-controlled – that encourages students to have fun while learning principles of computer science, technology, engineering, math, and physical science. Students design, construct and program the robots, and adult coaches are not allowed to assist during the events.

In 2007-2008 season, over 1,500 students competed in Robofest, including teams from Canada, South Korea, England, and France.

Teams compete in the junior division (grades 5-8) and senior division (grades 9-12). Student teams, composed of up to seven members each, can compete in several ways:

- **Games.** Students undertake annual robotic missions.
- **Exhibition.** Each team has complete freedom to show off any creative autonomous robotics project.
- **RoboFashion & Dance Show.** Teams of two robots will show off their costumes and dance moves.
- **Mini Urban Challenge.** Senior-level contestants use machine vision to enable a laptop-based robot to maneuver through a course simulating an urban road environment.
- **Warehouse Fire Fighting.** Find a candle and extinguish it in the shortest time. (Associate Event)
- **VEX Elevation.** Place cubes into goals! (Associate Event)



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 Rule: While adult mentorship is encouraged, students design, construct and program the robots, and adult coaches are not allowed to assist during the competition.

It's Flexible: Any type of robot kit, materials, actuators, and sensors are allowed. Robots can be programmed by using 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 schools, clubs or civic group.

Everyone is a Winner: All registered participants receive medals and certificates. Winners of the qualifying and championship rounds receive big trophies. Top teams receive \$2,000 LTU renewable scholarships.

Timeline

When	Events
<i>December 11</i>	Draft rules to be posted on the web at www.robofest.net Coach/Team Registration begins
<i>Early January</i>	Finalized official rules to be posted
<i>Mid January ~ February</i>	Technical workshops Site volunteer registration begins
<i>Sat. February 28</i>	Warm-up competitions and Judge training
<i>March ~ Mid April</i>	Regional Qualifying Competitions
<i>Sat. May 9, 2009</i>	10 th annual World Robofest Championship at Lawrence Tech in Southfield, Michigan

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robofest@LTU.edu 248-204-3569 Fax: 248-204-3518