



LAWRENCE TECHNOLOGICAL UNIVERSITYSM ROBOFEST

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

A Competition Motivating Young Minds to Master the Machine

An international competition for students grades 5 - 12, Robofest challenges participants to design, construct, and program robots to compete in missions or exhibition. Young people have fun while learning computer programming, engineering, math, and science. Started at Lawrence Technological University in 2000, Robofest has grown to include over 125 teams and hundreds of students at venues across the United States and in several other countries. Student teams, composed of two to seven members each, can compete in two ways:

Games: Students accomplish missions using two fully autonomous robots they have created and programmed to work cooperatively.

Exhibition: Students demonstrate the creative tasks they have created and programmed their autonomous robots to accomplish.

Age Divisions: Junior (students in 5–9 grades) and Senior (students in 9–12 grades)

Robofest's Unique Features:

Look Mom, No Hands: Students must totally program their robots to perform their missions with no human assistance. No joysticks or remote controls are allowed.

Your Mission, If You Decide to Accept It: Is unknown. At least partly. Students are given small changes in their mission that are kept secret until the beginning of each contest. Parts of the playing field are rearranged, and students must program their robots to work on the fly.

Students Rule: While adult mentorship is encouraged in all phases of preparation, students make all decisions and perform all robot construction and programming during the competition.

It's Affordable and Accessible: Team registration is only \$35. Teams can be formed by any organization such as schools, home school networks, clubs and civic groups.

Interested? Call 248.204.3566

E-mail LBirman@LTU.edu

www.Robofest.net

It's Flexible: Students can use any kind of robot kit, building materials, actuators and sensors, and software. Robot kits can include Basic Stamp®, Handy Board, Handy Cricket, Boe-Bot™, I-ROBO™, Lego® Mindstorms™, or VEX™. Building materials can include bolts, nuts, paint, glue, stickers, etc. Any kind of programming language is allowed, such as RCX code, RoboLab™, NQC, IC, C++, Visual Basic, PBasic, Forth, Python, Java™, and Logo.

ROBOFEST 2006 COMPETITION SITES AS OF 11/30/05:

| INSTITUTION NAME | LOCATION | DATE |
|-------------------------------------|-----------------------------|----------|
| Evergreen High School | San Jose, CA | April 8 |
| Woodland High School | Woodland, CA | April 29 |
| TBD | West Melbourne, FL | April 8 |
| Hillside Middle School | Northville, MI | April 1 |
| Macomb Intermediate School District | Clinton Township, MI | April 1 |
| Washtenaw Community College | Ann Arbor, MI | April 7 |
| Herlong Cathedral School | Detroit, MI | April 8 |
| Canton Charter Academy | Canton, MI | April 29 |
| Carman-Ainsworth Junior High | Flint, MI | April 22 |
| RoboTech Center | Nashua, NH | TBD |
| St. Matthew Lutheran Church | Houston, TX | April 22 |
| Sky Valley Education Center | Monroe, WA | April 29 |
| Erle Rivers High School | Milk River, Alberta, Canada | April 29 |
| Hanyang University | Ansan, Korea | Dec. 17 |
| World Robofest Championship | Southfield, MI | May 13 |

Robofest Timeline:

- **December 2005:** Coach and team registration begins, and it ends when all competition sites are filled. Register at www.robofest.net. The exact kick-off date will be announced via the Robofest e-newsletter
- **January 2006:** Rules will be finalized
- **April 2006:** International and regional competitions (Korea in December '05) Top teams move on to the Worlds
- **May 13, 2006:** World Robofest Championship on the Campus of LTU, Southfield, MI, USA



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