

ORTOP (OREGON ROBOTICS TOURNAMENT OUTREACH PROGRAM)

Parent organization: OUS (Oregon University System), Industry Affairs

Web address: <http://www.ortop.org/>

Grade level or ages served: Ages 9 – 14; approximately grades 4 – 9.

Overview: This is a local implementation of FIRST LEGO League. Teams of 4 – 10 kids prepare for a two-part themed competition, including: 1) a scored robot game of set missions on a 4' x 8' field with defined LEGO constructs and 2) a research/presentation project on some aspect of the yearly theme. Example themes are Arctic Challenge, Ocean Odyssey, Mars, No Limits (how technology can help people with limited physical abilities).

Subjects covered: Mechanical and software engineering, teamwork, research.

Size of program: In 2001, about 500 kids on 65 teams; in 2005, 2000 kids on 300 teams are expected. Covers all areas of Oregon.

Where offered: Community outreach organizations, i.e. Boys and Girls Clubs, Girl Scout Troops, public and private schools, after-school clubs, neighborhood clubs.

Time spent by students: Average of 4 – 8 hours per week during competition season, September 15 through mid-December. 15 local tournaments held in Portland metro, Bend, Roseburg, LaGrande, K-Falls and Corvallis, state tournament in mid-January

Partners/Sponsors: Intel, Vernier, RadiSys, ADP, Portland Youthworks, Tektronix, IBM, and other individual donors.

Materials available on web and/or purchase: Extensive materials on the website for download, with pointers to additional websites. A CD is also available upon request.

Training for teachers, facilitators, volunteers, leaders is: Available, Required. Free workshops available May – September: Introductory; Coaching/Mentoring Techniques; Robotics Techniques

Cost structure: Team fees for tournament registration, additional costs for playing field mat & LEGO constructs, kits (reusable year to year), outreach scholarships available to teams. Some community partners fund teams directly.

Funding: Individual fees and contributions from sponsors.

Other points of interest: A primary program goal is to include girls and under represented minority students on teams. Program does targeted outreach to encourage participation and provides scholarships. The program is also almost 100% staffed by volunteers.