



FIRST Tech Challenge (FTC) at a GLANCE (in Oregon) for students 7th – 12th Grades - 12 – 18 years old.



2008-2009 Timeline for FIRST Tech Challenge Participation

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| May 2008 | National FTC Team Registration Opens Online and materials order submitted. A team registration is for a maximum of 10 students. Kits begin to ship in August 2008 Public & Private School, Community Organization, Neighborhood Teams Welcomed |
| Mid-September | FTC Challenge released - Teams begin to solve FTC 2008 Challenge! |
| February or March 2008 | <i>FIRST</i> Tech Challenge Oregon Championship Location: TBD |
| April 2008 | Top Oregon <i>FIRST</i> Tech Challenge Teams advance to FIRST World Festival in Atlanta, GA |

FREE ORTOP Briefings/ Workshops for Adults

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| ~late Summer /Fall 2008 | Free ORTOP FTC Briefing offered for adults to learn how about the program. |
| Summer/Fall 2007 | Free ORTOP FTC Workshop offered for adults to learn how to build and program a <i>FIRST</i> Tech robot. |
| Briefings/Workshops will be conducted in the Portland area. There are tentative plans to hold briefings in other parts of Oregon. | |

FTC Program Elements

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| As a team of up to ten students work for 10 – 12 weeks to design and build robot with both controlled and autonomous behavior using the FTC Competition Robotics kit to meet the annual <i>FIRST</i> Tech Challenge. Allowable programming languages: NXT-G, Robot C, LabView. FTC robot can be disassembled and reused each year. |
| At the FTC Tournament teams will work in an alliance with and against other teams to solve the challenge featuring head-to-head competition and the use of alliances. The 2008 game will include tasks that reflect real-world issues faced by robotics designers today. Uneven surfaces, manipulation of objects, and greater use of sensor technology will be featured. |
| FTC Team creates an Engineering Notebook to document the “journey” the team took as they experienced the engineering design process. Notebook includes strategies, sketches, obstacles faced and lessons learned. |
| FTC Teams meet with a judging panel at the tournament to discuss their engineering experience. The judging panel accesses the robot’s mechanical engineering and programming, how well the team solved the challenge and their teamwork skills. |

Program Costs of the FIRST Tech Challenge

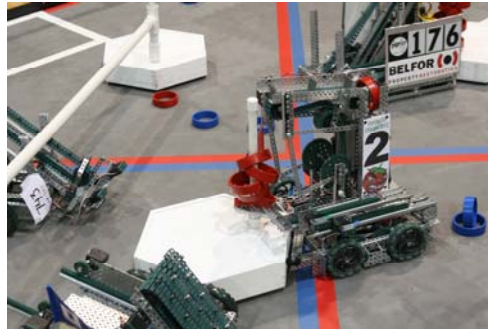
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| <i>FIRST</i> Tech Challenge National Registration (up to 10 students) | \$275 |
| <i>FIRST</i> Tech Robot Competition Kit includes a full complement of parts including three software packages, 11 motors, 10 sensors, Bluetooth communications, rechargeable batteries, metal gears, and a complete set of structural components. The kits are reconfigurable and can be used over multiple seasons. | \$900 |
| Cost of 2008 FTC Robot Kit* for 2007 FTC Participants with valid 2007 FTC Team Number *Last year’s Vex robot system will not be allowed | \$450 |
| ORTOP Tournament Program Fee | \$50 |
| Official <i>FIRST</i> Tech Challenge Competition Field (OPTIONAL) | ~\$1000 |
| Materials to build a usable full or partial FTC Competition Field from locally obtained construction materials (plywood, pvc pipe) | ~\$250 |
| Approximate minimum cost for a first year team | ~\$1475 |
| Approximate maximum cost for a first year team | ~\$2225 |
| Approximate cost for a returning team in 2008 | ~\$925 |
| Approximate cost for a returning team in 2009 | ~\$425 |

ORTOP Scholarships: Application available at www.ortop.org

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| ORTOP provides partial scholarships to cover fees, robot kits and tournament materials to schools and community organizations serving students that meet financial aid requirements. Requirements: At least a two year commitment to the FTC program |
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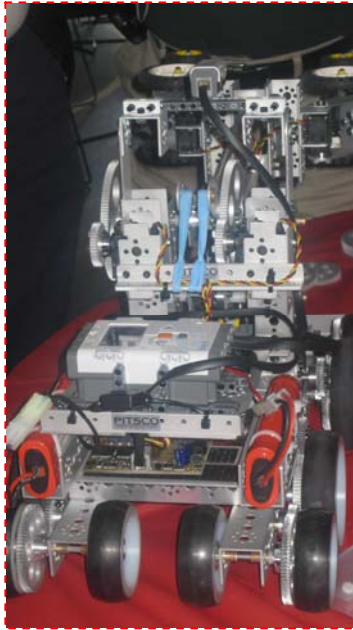
Web Resources

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| Oregon Robotics Tournament & Outreach Program (at Oregon University System) | http://www.ortop.org/vex.htm |
| FIRST TECH Challenge Program | http://www.usfirst.org/what/fvc/default.aspx?id=380 |
| Information about the New FTC Robot System | http://www.usfirst.org/community/fvc/content.aspx?id=8612 |



New FTC Tetrix Robot for 2008

The 2008 FTC game will include tasks that reflect real-world issues faced by robotics designers today; uneven surfaces, manipulation of objects, and greater use of sensor technology.



PHOTOS from the
**ORTOP 2007
FIRST TECH Challenge
"Quad Quandary"
State Championship**
at Glencoe High School
in Hillsboro.

"The most fun you'll
ever have while
wearing safety
glasses"

