

Wall-to-Wall Robots at NYU-Poly as 400 Brooklyn Students Compete in FIRST Games

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Brooklyn will be the borough of robots this Saturday, January 14, as more than 400 elementary and middle school students and their teachers gather at Polytechnic Institute of New York University (NYU-Poly) for the fast and furious qualifying round of the annual [FIRST® LEGO® League \(FLL®\)](#).

FLL is one of four robotics programs offered by [FIRST® \(For Inspiration and Recognition of Science and Technology\)](#), a not-for-profit that inspires students to get involved in science and technology via exciting, hands-on robotics competitions. This is the 12th year that NYU-Poly and [FIRST](#) have hosted FLL, which introduces kids ages 9-14 to the thrill of hands-on robotics, research, teamwork and inquiry-based problem solving, in order to spark a lifelong passion for science and technology. NYU-Poly works with New York [FIRST](#) on all four [FIRST](#) programs, which engage kids from the age of six through high school. In 2012, [FIRST](#) programs will involve more than 293,000 participants.

Hailing from neighborhoods all over Brooklyn, 43 FLL teams – along with their teachers, mentors, parents and even cheerleaders – are expected to pack the NYU-Poly gymnasium for a day of head-to-head challenges featuring the robots they have been building and programming since September 2011. Winners will advance to a regional competition at the Jacob K. Javits Center in Manhattan in March.

Each year, FLL selects a real-world problem that can be aided with technological or robotic solutions, and each student team conceives and designs a project to address the challenge. This year's theme, "Food Factor®: Keeping Food Safe," encourages students to devise ways to improve the security of the food supply, from safe transportation

and preparation of food to pest control and pollution. Teachers serve as supervisors and mentors throughout the process, and in 18 of the participating schools, NYU-Poly graduate students provided additional support. NYU-Poly President Jerry M. Hultin explained that the university's relationship with *FIRST* represents a critical element in NYU-Poly's efforts to ensure that students gain a strong early foothold in the sciences. "NYU-Poly is deeply committed to opening up opportunities for young people in our community to learn about engineering, math, science and technology in meaningful and highly effective ways within their schools," he said. "We have focused on schools where strong mentors are critical to students' success, and our programs reinforce those mentors' skills."

NYU-Poly supports in-school robotics initiatives in 22 Brooklyn elementary, middle and high schools as part of two affiliated initiatives, called Applying Mechatronics to Promote Science (AMPS) and Central Brooklyn STEM (science, technology, engineering and mathematics) Initiative (CBSI). Together, they send NYU-Poly graduate students into local schools to challenge students to design, build and operate robotic devices, teach science and engineering, and provide training to advance teachers' understanding of STEM subjects. The results are powerful: 65 percent of participating students increased their STEM grades by a half or full-letter grade.

"NYU-Poly's experience integrating *FIRST* in its STEM education programs is exciting," said Jon Dudas, president of *FIRST*. "*FIRST* is a terrific portal into the world of engineering and robotics, and NYU-Poly is using *FIRST* to provide greater access for schools, teachers and students for hands-on training, mentoring and techniques for success in *FIRST* programs, and then connect these activities to new opportunities for quality STEM education in schools and student achievement in STEM disciplines."

Hultin added, "*FIRST* does an incredible job of tapping the talent of kids who may otherwise miss the chance to discover their love of science and the satisfaction of working as a team. NYU-Poly intends to deepen our partnership with *FIRST* over the coming years, to work together to expand participation and to extend our robotics-based education programs."

AMPS/CBSI is a public-private partnership supported by [The Black Male Donor Collaborative](#), the [Brooklyn Community Foundation](#), [J.P. Morgan Chase Foundation](#), [XEROX Foundation](#), [NY Space Grant Consortium](#) and White Cedar Fund, and the supporting graduate fellows program receives major funding from [National Science Foundation's](#) GK-12 Fellows Program.

In addition to the FLL, *FIRST* offers Junior *FIRST*® LEGO® League (Jr.FLL®) for 6 to 9 year olds, and *FIRST*® Tech Challenge (FTC®) and *FIRST*® Robotics Competition (FRC®), both for high school students. RC, known as a "Varsity Sport for the Mind™," challenges teens to design, build, program and test a robot to meet a specific challenge. The *FIRST* contests at NYU-Poly are sponsored by [Time Warner Cable](#) and [Con Edison](#).

About *FIRST*®

Accomplished inventor [Dean Kamen](#) founded *FIRST*® (For Inspiration and Recognition of Science and Technology) in 1989 to inspire an appreciation of science and technology in young people. Based in Manchester, N.H., *FIRST* designs accessible, innovative programs to build self-confidence, knowledge, and life skills while motivating young people to pursue opportunities in science, technology, and engineering. With support from three out of every five Fortune 500 companies and nearly \$14 million in college scholarships, the not-for-profit organization hosts the [FIRST® Robotics Competition](#) (FRC®) and [FIRST® Tech Challenge](#) (FTC®) for high-school students, [FIRST® LEGO® League](#) (FLL®) for 9 to 14-year-olds, (9 to 16-year-olds outside the U.S., Canada, and Mexico) and [Junior FIRST® LEGO® League](#) (Jr.FLL®) for 6 to 9-year-olds. [Gracious Professionalism™](#) is a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community. To learn more about *FIRST*, go to www.usfirst.org.

About Polytechnic Institute of New York University

Polytechnic Institute of New York University (formerly Polytechnic University), an affiliate of New York University, is a comprehensive school of engineering, applied sciences, technology and research, and is rooted in a 158-year tradition of invention, innovation and entrepreneurship: i²e. The institution, founded in 1854, is the nation's second-oldest private engineering school. In addition to its main campus in New York City at MetroTech Center in downtown Brooklyn, it also offers programs at sites throughout the region and around the globe. Globally, NYU-Poly has programs in Israel, China and is an integral part of NYU's campus in Abu Dhabi. For more information, visit www.poly.edu.

Note to Editors:

To download images from last year's event, visit <http://research.poly.edu/~resourcespace/?c=517&k=c32a0d2935>