Milford Area Youth Homeschoolers Enriching Minds

"…to create a world where science and technology are celebrated…. where young people dream of becoming science and technology heroes…"

FIRST Founder, Dean Kamen

Milford Area Youth Homeschoolers Enriching Minds is a volunteer, non-profit 501(c)(3) organization incorporated in New Hampshire in 2004 to provide educational enrichment for students in the areas of science, technology, and engineering. Founded primarily for homeschoolers who otherwise might not have such opportunities, MAYHEM is eager to help all students, private or public, experience the benefits of terrific programs like FIRST LEGO League (FLL) and FIRST Robotics Competition (FRC). FIRST promotes academic excellence and gives students a chance to learn leadership skills they will need throughout life. Skills such as communication, problem-solving, task-ownership, project management, and gracious professionalism are just a sample of the skills taught and practiced in FLL and FRC.

"…It's like life. You never have enough information. You never have enough time. The kit of materials may be what you have in the warehouse. There are always people doing competing things and you must have a strategy. We've created a microcosm of the real engineering experience."

Woodie Flowers, Co-Founder FIRST Robotics Competition

The 2007-2008 MAYHEM teams are composed of home, private, and public schooled students from 12 Milford-area communities:

Wilton	**Manchester**
Nashua	**Londonderry**
Mont Vernon	**Hollis**
Milford	**Goffstown**
Merrimack	**Bedford**
Mason	**Amherst**

About FIRST

FIRST (For Inspiration and Recognition of Science and Technology) is a non-profit organization founded in 1989 by Dean Kamen. 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. There are two well-known programs: FIRST Robotics Competition (FRC) for high school students and FIRST LEGO League (FLL) for children 9-14 years old.

What is FIRST Robotics Competition?

FRC is an annual engineering design challenge for high school students -- working with professional engineering and business mentors -- to design and build a robot and compete in high-intensity tournaments that measure the effectiveness of each robot, the power of team strategy and collaboration, and the determination of students. The program is a life-changing, career-molding experience -- and a lot of fun. In 2007, the competition included more than 32,500 students on 1,307 teams from Canada, Brazil, Netherlands, Israel, Mexico, U.K., and nearly every U.S. state. See: www.usfirst.org

What is FIRST LEGO League?

FLL, considered the "little league" of the FIRST Robotics Competition, is the result of a partnership between FIRST and the LEGO Group. FLL extends the FIRST concept of inspiring and celebrating science and technology to children aged 9 through 14, using real-world context and hands-on experimentation. The goal of the program is to give children the opportunity to discover how exciting and rewarding science, math, and technology can be.

Teams develop problem solving skills and teamwork as they design, build, program, and operate autonomous robots to meet the year's mission challenge. Using LEGO bricks and other elements such as sensors, motors, and gears, teams gain experience in engineering and computer programming principles as they construct and program their unique robot inventions. Teams are also judged on their research of a real world problem and their ability to present the research in a creative way. In 2006, over 88,000 children from 37 countries participated in FLL. See: www.firstlegoleague.org

MORE MAYHEM

MINDSTORMS MAYHEM

MECHANICAL MAYHEM

What's with all the MAYHEM ?

First, team Mindstorms Mayhem...

Established in 2002, Mindstorms Mayhem, a FIRST LEGO League (FLL) youth robotics team, has emerged as State Champions, earning them the privilege of representing NH at the FLL World Festival, in three years since their inception. As the "varsity" MAYHEM FLL team, they have progressed to more sophisticated design principles and more advanced programming. They have been an inspiration and role model to other teams.

The Broader Team

The combination of FLL and FRC teams provides local professionals with new partnership opportunities to promote science, engineering, and technology in the lives of youth in our local communities. We'd like to thank our sponsors for enabling us to compete successfully each of the past six years. Our sponsors are a vital part of our team! Without their support we would not have the opportunities now open to us to teach students even more advanced robotics, technology, and science. However, the costs associated with having FLL and FRC teams are substantial. Registration fees, robot parts, tools, materials, supplies, travel and lodging are examples of some of the expenses. Nevertheless, the value of the experience, knowledge, and skills gained by the students far outweighs the costs!

Thanks to our past sponsors!

"***FIRST isn't just about robots, it's about developing life skills. The partnership between academia, community and industry...will build future employees and future citizens***."

Steve Sanghi, President and CEO Microchip Technology

Then, team Mechanical Mayhem!

With winning the International FLL Championship in 2004 came a challenge grant from the LEGO Group for Mindstorms Mayhem to advance to the next level by creating a FIRST Robotics Competition (FRC) team. With the LEGO grant and partial sponsorship from BAE Systems, Mindstorms Mayhem accepted the challenge and Mechanical Mayhem, Team #1519, was born!

From a modest beginning with 12 students in 2004, they developed the knowledge base and technical expertise to annually design, fabricate, test, and deliver a full-scale, 130-pound competition robot. The team has far exceeded all expectations, winning 5 of 17 local and regional tournaments. In addition to these champion awards, they have also achieved other distinctions such as Rookie Inspiration Award, Top Seed, Judges' Merit Award, Most Diverse Robot, and several human player awards. Now in their fourth year of competition, they have grown to 23 students.

Now, team More Mayhem!

Because of the great interest in the program, a new FLL team, More Mayhem, was created in the fall of 2005. This "junior varsity" Mayhem FLL team gives students a solid foundation in robot design and programming and in research techniques. More Mayhem qualified for the state tournament in each of their first three years, and has established themselves as a team to watch!

"FLL is a very social process that requires ingenuity, critical thinking, and collaboration. These are the very skills that make us successful adults."

Devin Blizzard, Principal, Fresno CA

How To Find Out More!

If you have students that would like to participate with MAYHEM teams, or if you would like to help with donations of materials, work space, mentoring partnerships, or financial contributions, please contact us or visit our web site for more information:

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