

Since 1989, the FIRST Robotics Competition has grown from 28 teams to 935 today.

Over 90% of the high schools and their company mentors have stayed involved year after year.

## FIRST

200 Bedford Street Manchester, NH 03101 800.871.8326 www.usfirst.org



# THE FIRST ROBOTICS COMPETITION

## What is it?

A unique varsity sport of the mind designed to help high school students discover how interesting and rewarding the life of engineers and researchers can be.

#### What is unique?

It is a sport where the students play with the pros and learn from them



- » Designing and building a robot is a fascinating real world professional experience
- » Competing on stage brings students as much excitement and adrenaline rush as conventional varsity tournaments
- » The game rules are a surprise every year

#### How it works

The FIRST Robotics Competition stages short games played by remote-controlled robots. The robots are designed and built in 6 weeks (out of a common set of basic parts) by a team of 15 to 25 high school students and a handful of engineers-mentors. The students pilot the robots on the field.

Each school year, teams are formed in the fall. Competitions take place in March and April. The FIRST Robotics Regional competitions are typically held in university arenas. They involve 40 to 70 teams cheered by thousands of fans over two and a half days. A championship event caps the season. Referees oversee the Competition. Judges present awards to teams for design, technology, sportsmanship and commitment to FIRST. The Chairman's Award is FIRST's highest honor.



# THE FIRST ROBOTICS COMPETITION

#### What is needed to start a team:

- » A few engineer volunteers (3 to 6) encouraged by their company's senior management
- » 15 to 25 high school students led by a teacher, ideally supported by the school principal and a group of parent volunteers
- Funding (about \$15,000 to \$30,000) to participate in 2 to 3 Regional Competitions provided by a single company, a group of companies and/or through school fund-raising efforts

#### What is needed to host a FIRST Robotics Regional Competition:

Funding (\$150,000 to \$200,000) raised from corporations, foundations, individuals and administrations

Volunteers to organize, raise funds, recruit new teams and support the competition itself (judges, referees, announcers, security, etc.)

#### What has been accomplished to date

- Since 1989, the FIRST Robotics Competition has grown from 28 teams involved to 935 today
- » Over 90% of the high schools and their company mentors have stayed involved year after year
- » The positive impact on student interest in engineering is proven
- » Participants have learned the great value of teamwork, self-starting, character, time management, speed, etc.
- In most schools, participation in The FIRST Robotics Competition has had a broad positive impact beyond the team itself. The FIRST Competition is one of the varsity sports in yearbooks
- » Volunteers enjoy participation year after year
- The major media provide coverage of FIRST and the impact of the FIRST Robotics Competition

#### Hope for the future

We know the FIRST Robotics Competition will have succeeded when every year:

- » More than half of high schools are funding their FIRST teams like all other varsity activities
- » More than 12,000 corporations are volunteering engineers-mentors for these teams year after year
- » FIRST Robotics Competition events are as common as any other high school sports event
- » The Championship is televised like the NCAA tournament
- > The FIRST volunteer organization is recognized and admired worldwide.

#### FIRST

200 Bedford Street Manchester, NH 03101 800.871.8326 www.usfirst.org