



CONCEPT
ROBOTICS
PROGRAM

CONCEPT ROBOTICS

 Concept Schools Educational Technology Department  Csedtech

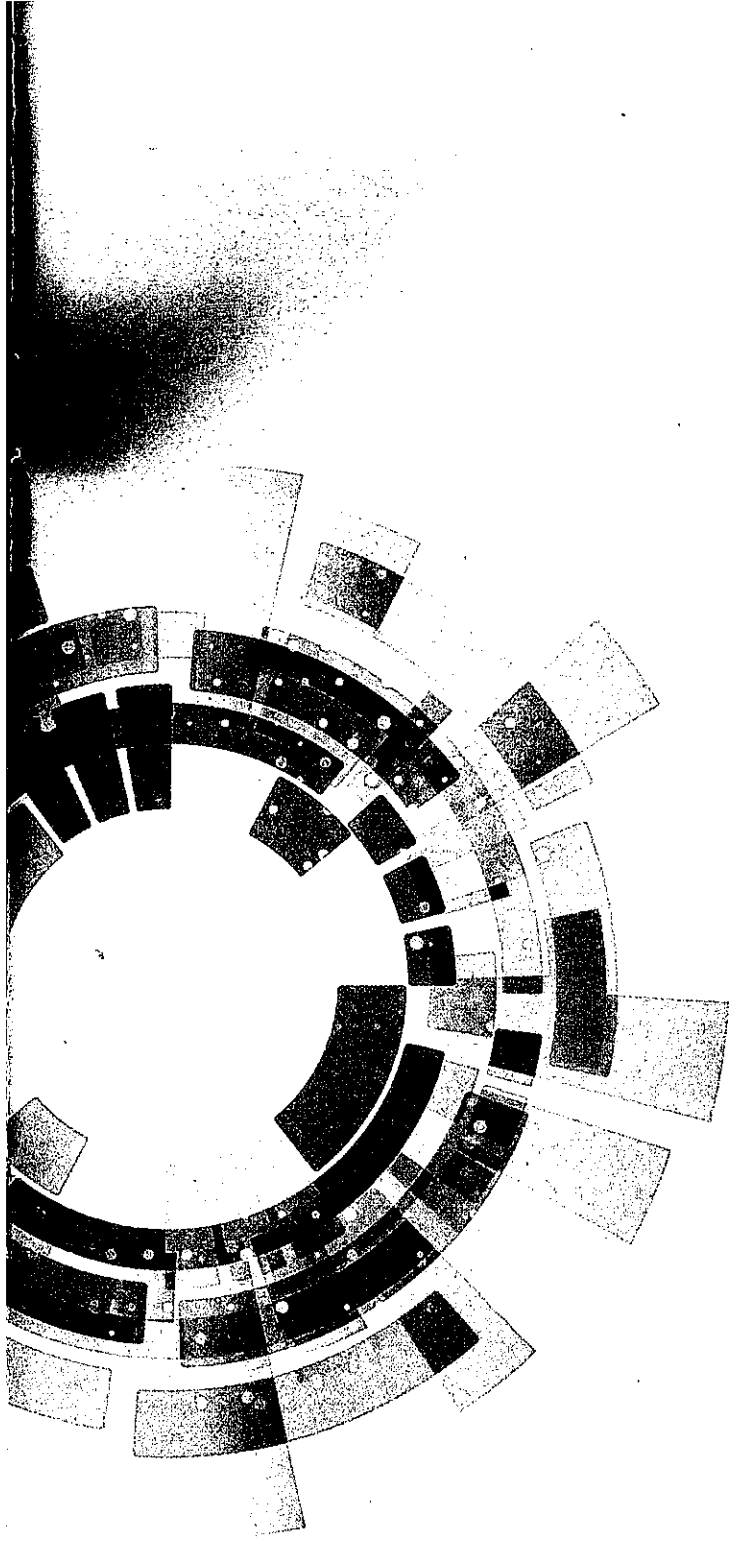


What is Concept Robotics?

Concept Schools is committed to exciting students about science and technology with variety of programs. Concept Schools has adapted various engineering programs such as Project Lead The Way (PLTW) and Gateway to Technology (GTT) and created its own STEM Clubs, where students learn, create, practice and compete in state and nationwide robotics competitions.

One program that our schools follow is FIRST Robotics. Concept Schools has successfully adapted Jr. FLL, FLL, FTC, and FRC programs and not only participates in FIRST competitions but also hosts and organizes tournaments.

Concept Schools also hosts and organizes its very own Sumobot Robotics Competition, RoboCON.



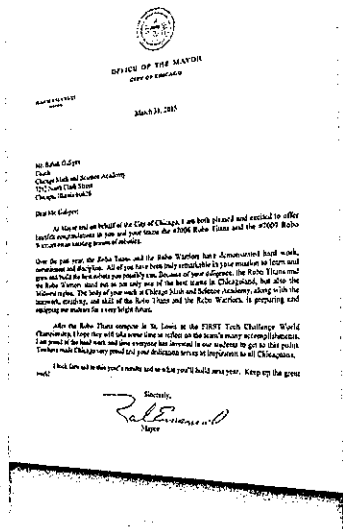


Benefits of Robotics Program

Our Robotics Program builds and strengthens cognitive development, as well as other academic areas such as mathematics, engineering, communication skills, strategic thinking and goal-oriented thinking.

Qualified Coaches and Mentors

Concept Schools Robotics coaches have deep content knowledge in the STEM subjects and also serve as technology teachers for their schools. Teams also receive support from outside mentors, such as local business leaders and college students majoring in STEM fields; who help Robotics students with their projects and talk about their career choices.



Chicago Mayor Recognizes CMSA Robotitans and Robo Warriors.

College and Career Preparation

During the program, students:

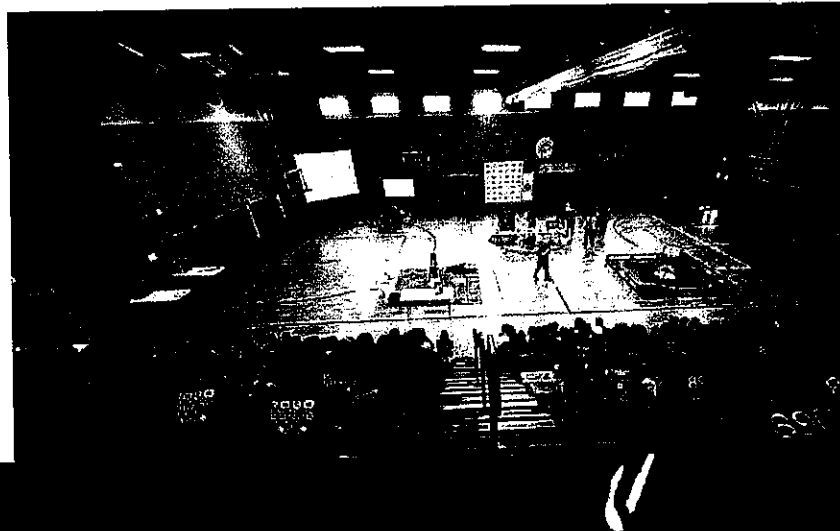
- become actively involved in their own learning process;
- use the engineering process;
- experience problem-based learning through integration and application of knowledge;
- develop interest in math and scientific technology;
- become active learners;
- practice thinking through problems strategically and
- start preparing for the competitive workforce.

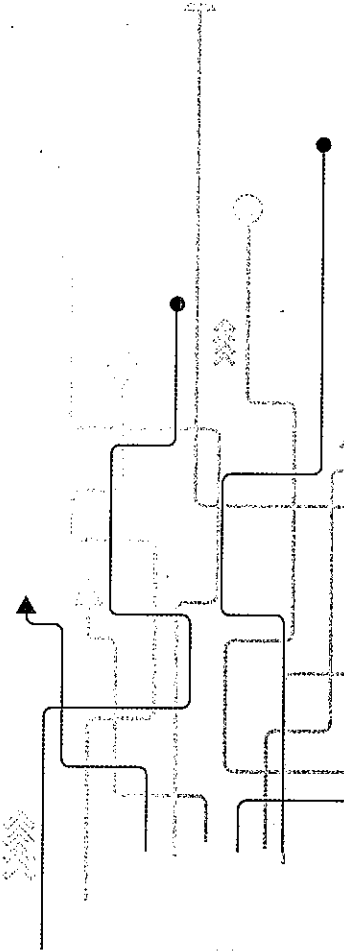
Our Robotics teams routinely visit college campuses, engineering labs, and meet with current college students to explore their future majors and career choices.



Encourages Girls to Embrace STEM

Concept Schools Robotics seeks to narrow the gender gap in STEM college majors and careers by encouraging more female students to join our Robotics teams and take leadership roles such as team captain or lead programmer.



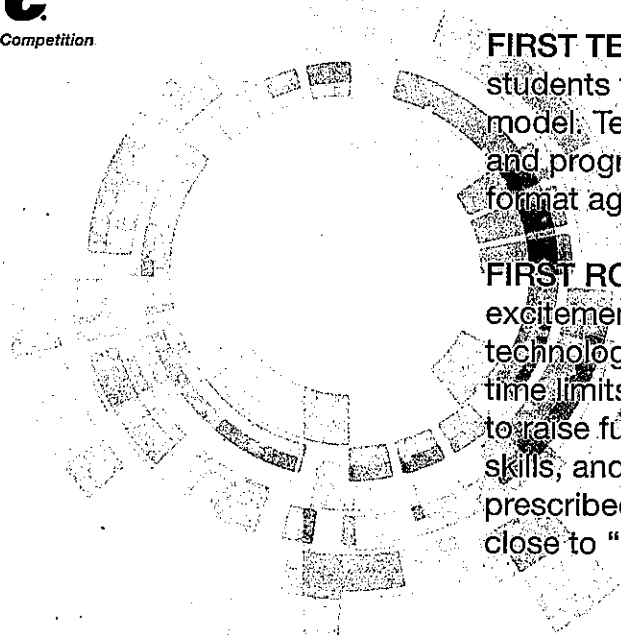


FIRST was founded in 1989 to inspire young people's interest and participation in science and technology by Dean Kamen. FIRST designs accessible, innovative programs that motivate young people to pursue education and career opportunities in science, technology, engineering, and math, while building self-confidence, knowledge, and life skills.

JUNIOR FIRST LEGO LEAGUE (Jr. FLL) captures young children's inherent curiosity and directs it toward discovering the wonders of science and technology. This program features a real-world scientific concept to be explored through research, teamwork, construction, and imagination.

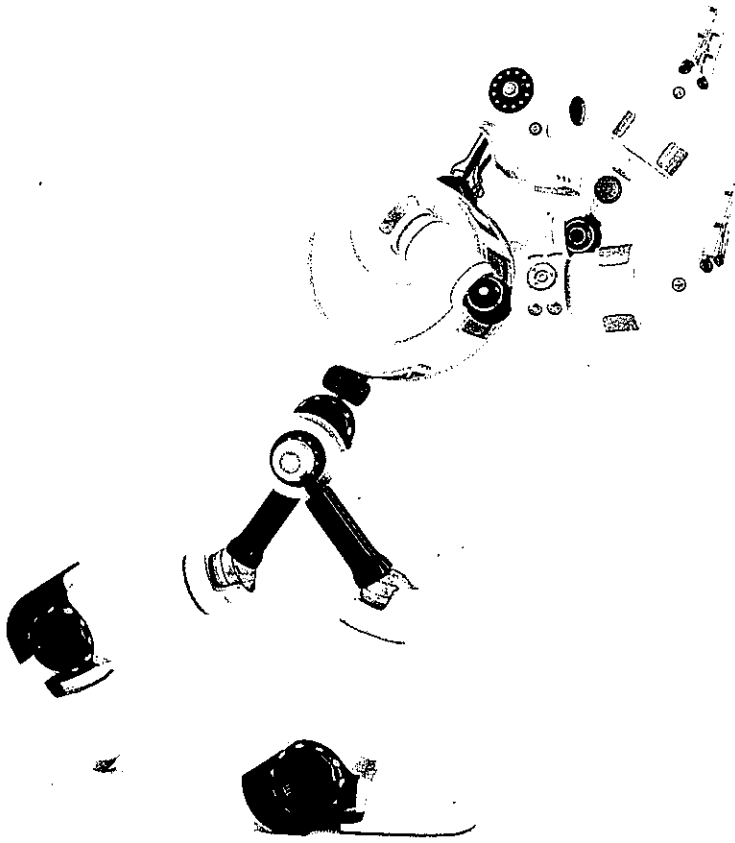
FIRST LEGO LEAGUE (FLL) introduces younger students to real-world engineering challenges by building LEGO-based robots to complete tasks on a thematic playing surface.

FIRST TECH COMPETITION (FTC) is designed for students to compete head to head, using a sports model. Teams are responsible for designing, building, and programming their robots to compete in an alliance format against other teams.



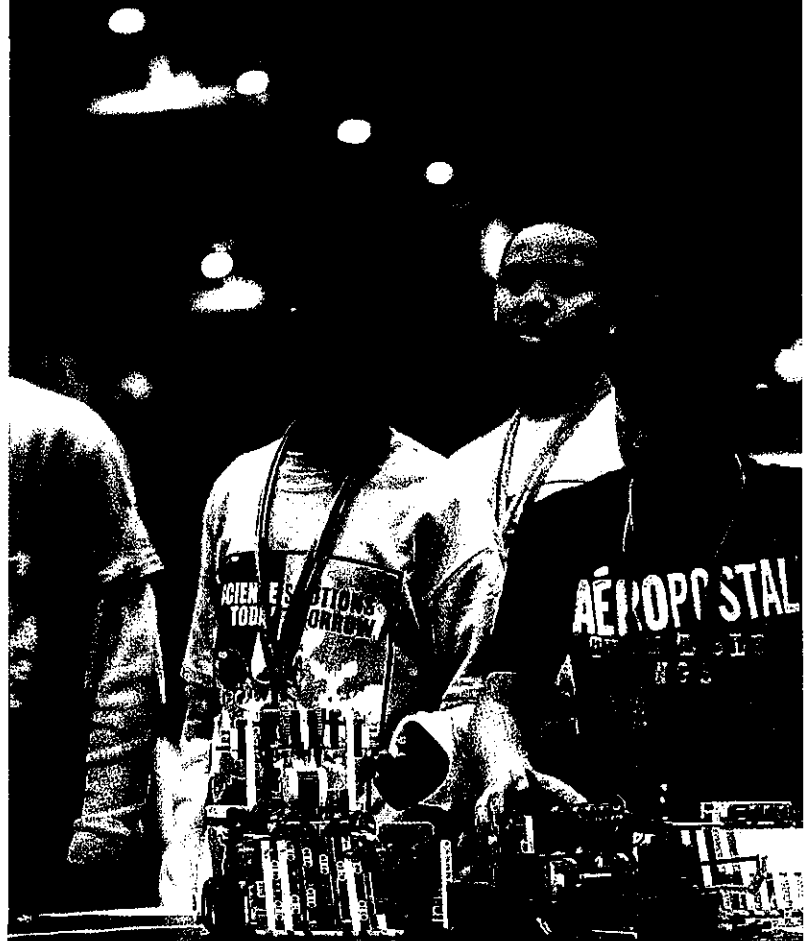
FIRST ROBOTICS CHALLENGE (FRC) combines the excitement of sport with the rigors of science and technology. Under strict rules, limited resources, and time limits, teams of 25 students or more are challenged to raise funds, design a team "brand," hone teamwork skills, and build and program a robot to perform prescribed tasks against a field of competitors. It's as close to "real world" engineering as a student can get.

What is RoboCON



CONCEPT ROBOTICS

RoboCON, is a part of the Concept Schools annual StemCON – Science, Technology, Engineering, and Math Convention. In this robotic sumo contest, two autonomous robots attempt to push each other out of a circular arena using mechanisms, cunning, and brute force.



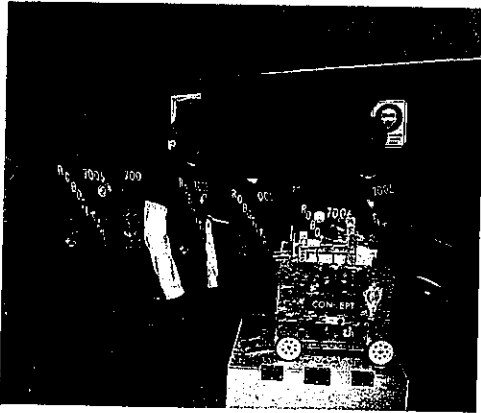


A glimpse into our success

Concept Schools Robotics teams have advanced to and won in many state, regional, national, and international competitions.



Statewide



Indiana State Tournaments

Gracious Gracious Professionalism Award – IMSA North FLL

Motivate Award – CMSA FTC

Winning Alliance Captain Award - HSA Cleveland High FTC

Ohio State Tournaments

Mechanical Design Award – HSA Dayton Elementary FLL

Inspiration Award – Lorain FLL

Judge's Special Award – HSA Lorain FLL

Robot Performance Award – HSA Columbus Middle FLL

Programming Award – Noble Academy Columbus FLL

Judge's Award- HSA Cleveland High FTC

Finalist Alliance Captain Award - HSA Cleveland High FTC

Illinois State Tournaments

Motivate Award – CMSA FTC

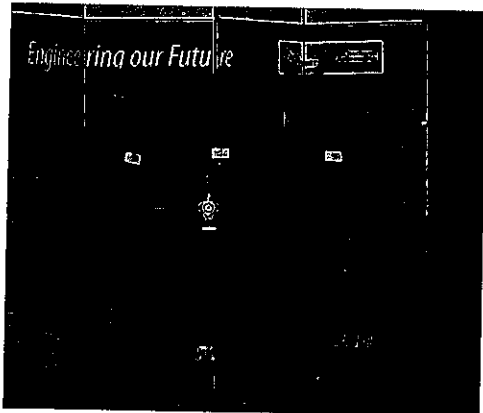
Rookie Award – HSA McKinley FTC

Finalist Alliance Captain Award - HSA McKinley FTC

Winning Alliance Captain Award - HSA McKinley FTC

Judge's Award- HSA McKinley FTC

Control Award - HSA McKinley FTC



Nationwide

National Tournament Participation

CMSA -FTC

HSA Cincinnati FTC

International

World Championship Participations

CMSA -FTC

HSA Cincinnati FTC





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www.conceptschools.org