





The eTREC Robotics Club is looking for team members:

Does the notion of working with robotics intrigue you? Would you like to build a robot that can do a multitude of things? Now is your chance. The East Troy Robotics and Engineering Club (eTREC) is looking for students in grades 8 thru 12 to join our FIRST FTC team. We are looking for students who have, or are interested in learning, any of the following skills.

*Building a robot *Building and dis-assembling mechanical devices *Working with computers and/or electronics *Computer programing *Social media skills (Facebook, twitter, website design and maintenance) *Graphics Art design *CAD design *3D printing and design *Making parts using a metal lathe, vertical mill, welder, table saw, band saw, or a laser cutter *using electronic test equipment *using hand tools

What is FIRST Tech Challenge (FTC):

FIRST (For Inspiration and Recognition of Science and Technology) **Tech Challenge** is an international robotics program (usfirst.org) that introduces 8th-12th graders to robotics, engineering and programming. During the season, teams design, test, build, and program a robot to complete a task that is assigned at the beginning of the season. FTC's main goals are to teach engineering and science to teenagers, to inspire gracious professionalism, and to have fun!

Fundraising:

To operate for the season the team needs to raise between \$4,000 and \$6,000 to cover registration fees and purchase computers, electronics, motors, raw materials, fasteners, tools, etc. This is accomplished by contacting local businesses to ask for their financial support. The team may also do additional fundraiser(s), as allowed by school policies.

FIRST FTC Membership:

To participate, you must be in 8th through 12th grade and register with FIRST (there is no charge to register).

Team Goals:

*Learn about the engineering design process *Learn how to build a robot *Learn to program a robot with Java *Do outreach to the schools to promote STEM and STEAM *Function as a team *HAVE FUN!!!

Schedule:

During the school year (Sep-May) we will practice twice a week, one week night (usually Wednesday) and Saturday mornings from 9 a.m. to noon. Practices will be held in the East Troy high school robotics lab. We anticipate a commitment of about 100 hours from each team member.

Team Member Expectations:

Members are expected to wear safety glasses and close-toes shoes at all times. Team members should have an e-mail account for team communications (gmail is free). You are also expected to practice gracious professionalism, which means no put downs, no rude comments, be encouraging and supportive of our school, our team, and other teams.

Competitions:

The team will compete in at least one competition and may attend one or two other events during the season. We will carpool to competition(s) and other event(s). During competitions and event trips, team members will be responsible for personal expenses such as food, lodging, etc.

Joining the Team:

Anyone who wishes to join the team can contact any team member or mentor, send us an email at etrec.ftc@gmail.com, or visit the team website (www.etrecrobotics.com) and click on the sign-up link, or leave us a message on the contact page.

Contact Information:

Team Information: Website: <u>WWW.eTRECrobotics.com</u> Email: <u>eTREC.ftc@gmail.com</u>

Lead Mentor: Tim Griffin, N7425 Hamms Rd Burlington, WI Burlington, WI 53105 Ph. 262-642-4458