



HIGH TECH KIDS
BUILD. CREATE. THRIVE.™



2016 MN FTC KICKOFF BREAKOUT SESSION SUMMARIES

Veterans

Fundraising: It's Not as Scary as it Sounds

As a third year FTC team, we have been able to pay for our annual expenses with no funding from the team members themselves. This presentation will discuss several methods to obtain funds for the season and how to approach each one.

FTC Team: 8808
Ponytail Posse
Rookie Year: 2014

Advanced Programming Techniques & Autonomous Strategy

We will divide our presentation into two parts: one part to specifically talk about autonomous programming strategy and one part to delve into more complicated Java programming techniques. At the end, we plan to take questions and provide helpful resources to attendees.

FTC Team: 8686
Height Differential
Rookie Year: 2014

Getting into the CAD and 3D Printing

Have you ever been interested in taking your napkin drawings to the next level? If so, this presentation will teach you about the wonderful world of Computer Aided Design or CAD as well as how to bring your creations to life using 3D printing. With a combination of CAD and 3D printing this presentation will surely take your team to new heights.

FTC Team: 7190
Green Girls
Rookie Year: 2013

General Interest

Building a Structurally Sound Robot

In this presentation, teams will learn how to build a more structurally sound robot. We will provide the tips and tricks we have learned that are directly applicable to both FTC and FRC teams.

FTC Team: 8686
Height Differential
Rookie Year: 2014

Memoirs of an Engineer: the Engineering Notebook

Engineering notebooks should capture the journey and mission of your team throughout your build season. We will discuss the concept of paper vs. print notebooks, give tips as to what the judges are really looking for, and tell you what is necessary for a successful notebook. Overall, this presentation will show attendees how to create a clear and concise presentation of their season.

FTC Team: 7190
Green Girls
Rookie Year: 2013

Community Outreach: Tips, Tricks and Strategies!

Come one, come all! Whether you are a rookie team or a veteran team, this session on community outreach will benefit you. We will cover what outreach is, how much to do, what kind to focus on, prioritizing events, having an overall mission in your outreach, saying "no" when you have too many events, involving the entire team, planning events, presenting outreach to judges, recording it in the Engineering Notebook and Business Plan, meeting criteria for the Connect Award, and more!

FTC Team: 9205
Iron Maidens
Rookie Year: 2014

Rookies

When and How to Use Autonomous

A lot of teams have a skewed view on what autonomous is and how to use it. We will talk about how to strategize the use of autonomous using our own code and experiences, as well as examples from past years and world caliber teams.

FTC Team: 7655
The Q is Silqent
Rookie Year: 2013

First Tournament 101

This session will help teams have a clear idea of what to expect at their first tournament. We will cover include outreach, judging sessions, inspection, engineering notebooks and more. Our team will create an open environment where teams can get their questions answered before the tournament begins.

FTC Team: 9890
RUBIES
Rookie Year: 2015

Don't be a Nervous Nelly: Judging 101

Judging can be a nerve wracking experience, but it doesn't have to be. This presentation will prepare you for a judging session by covering how to present, what the judges are looking for, how to win the awards you want, and much more. So don't be nervous for judging, come prepared.

FTC Team: 8712
EPIC
Rookie Year: 2014

Professional Track

Appendages and Manipulators in FTC

This session will focus on the mechanical design of actuators and assemblies which are not the drive train of the robot. We will discuss arms, conveyors, collectors, shooters, turrets, grippers and more!

Andy Baker
AndyMark, Inc.

Incorporating Stratasys 3D Printing in FTC

Stratasys empowers the dreamers to dream, inventors to invent, doctors to heal and industry to grow. We are shaping innovation, creativity, discovery, education, imagination and the possibilities of tomorrow. Come learn how you can employ the powerful technology of Stratasys 3D printing to succeed in *FIRST* Tech Challenge.

Evan Hochstein
Stratasys

Simply Sensors: How to Select the Sensors the Get the Job Done!

Are you ever tempted to use an abundance of sensors or confused which one to use? Learn how to determine which sensors are needed for your challenge and resist the temptation to add sensors just because you can! This session will walk you through the different types of sensors, the pros and cons, as well as how to incorporate them into your design.

Patrick McKinney
Recon Robotics

Parents and Mentors

Supporting Your Team

What are the expectations for new students in FTC? What do you need to understand in order to help your student reach their goals? Come learn what makes a successful FTC season and all the fun ways you can help in ways both large and small throughout the upcoming season.

MN FTC Affiliate Partner
Caitie Ryan-Norton
High Tech Kids
Rookie Year: 1999

The Future of MN FTC

MN is one of the fastest growing partners and has become one of the largest partners in a few short years. To handle this growth, we have been asked "What about Leagues?" Join us for this collaborative discussion about the logistics of leagues and what it will take to transition to this new model.

MN FTC Affiliate Partner
Bethany Tourek & Vicki Coaty
High Tech Kids
Rookie Year: 1999

Mentor Roundtable

Network with other mentors to learn best practices to keep your sanity throughout the season, while providing a great experience for the students.

FTC Mentors