FRC First Robotics Fall Workshops

KICK-OFF AND BRAINSTORMING
Presented by 2771 Code Red – We will discuss game reveal day, how to hit the ground running immediately afterward and make the most of your first few days of the FRC build season.

FIRST INFORMATION
Presented by Jen Jura (4956 RoboSharks) – Navigating FIRST Inspires and the Dashboard can feel like a juggling act. This session will provide helpful tips for finding necessary information, dealing with finances, event registration, sponsor & school info, and managing team members/volunteers/mentors. Jen will also address how to manage multiple teams for anyone interested in FTC, FLL or FLL Jr. teams. Bring your tablets/laptops if you'd like.

RUNNING EFFECTIVE TEAM MEETINGS
Presented by Nicki Bonczyk (107 R.O.B.O.T.I.C.S.) – During this session, we will look into ways to develop an organized team meeting and effective communication. Teams in the session will evaluate their team structure and how their team comes together throughout the season.

TEAM SAFETY
Presented by Nicki Bonczyk & Tyler DeVries (107 R.O.B.O.T.I.C.S.) – This course will identify ways for teams to develop a culture of safety and make safety a priority for the team. This course is not designed to teach teams safety practices. For example, we will not be demonstrating how to effectively use a fire extinguisher.

CHAIRMAN'S CHAT
Presented by Nicki Bonczyk & Tyler DeVries (107 R.O.B.O.T.I.C.S.), Morrie Cunningham (4003 TriSonics) and Laura Westrate (85 B.O.B.) – Presentation will take place in the afternoon sessions. During the first session, we will talk about what the award is, applying for the award and working effectively through the award. During the second session, we will have a Q&A forum with teams that have won the award in the past to share their experiences and their personal tips and tricks. NOTE: Feel free to attend just one of the sessions but we hope you attend both to receive the full information.

CAD
Presented by Mike Haaser (1918 NC GEARS) – The intro session will cover topics such as why use CAD, what does CAD do, examples, downloading and setting up. The advanced session will cover a lot more project-related topics. For the advanced session, bring your laptop with CAD installed and we will work on real-life demos and resolve any issues you have and address questions.

ELECTRICAL
Presented by Mike Tucker (4381 Twisted Devils) – All sorts of topics including reviewing the FRC electrical rules, proper soldering, sensor selection and wiring, encoder selection and wiring, labeling electrical devices, securing devices to a panel, wiring strategies for quick replacement in the field, using test equipment for fault analysis, and more.

PNEUMATICS
Presented by Chad Potinsky (4003 TriSonics) – Topics will include: Introduction, advantages/disadvantages of air, components, and demonstration.

MANIPULATOR TYPES
Presented by Wayne Tenbrink/Andrew Redder (1918 NC GEARS)– Overview of the common Manipulator Modules/Mechanical Systems/Mechanical Components, recommended practices (KISS, modularity, post-bag-era rules, serviceability, etc.), Make vs. Buy, resource library for parts and materials, and more.

LABVIEW
Presented by Jonathan Tuuk (1918 NC GEARS) – We will cover how LabVIEW works, typical VIs used in FRC, how to create code for a basic robot, how to deploy code to the roboRio, plus other topics depending on attendee knowledge and interests.

GAME STRATEGY
Presented by Cory Walters (2767 Stryke Force) – Game Strategy in regards to the following areas: dictating robot design, drive team, game planning, robot play book, finding weak spots in your opponents, and game evolution. If time, we will review game footage available online and break down match play and strategy options.

SCOUTING AND DATA ANALYSIS
Presented by Matt VanderPloeg (107 ROBOTICS) and Alicia Bay (1918 NC GEARS) – The first session will cover a scouting overview and quickly dive into electronic data collection for scouting. We will review different options, do some demos and review tips and techniques that we've learned. The second session will be dedicated to working with the data collected for qualification/elimination round game strategy and alliance selection. We will have demos in Excel, Tableau & Microsoft BI.

SCHOLARSHIP/COLLEGE APPLICATIONS – finding opportunities and writing strong application essays
Presented by Linda Baas (2771 Code Red) – As a FIRST student, you have an advantage in the world of college applications and scholarships. Your FIRST experience is a desired extra-curricular in your application and offers excellent material for an application essay. Plus, millions of dollars in scholarships offered exclusively to FIRST students. This workshop is designed to give you information and tips on applying to colleges, finding scholarships, and writing stand-out application essays for both college and scholarships.