FLL ROBOT GAME STRATEGY

By Droids Robotics, 2015

Coming up with a strategy for your Robot Game is important. It helps your team focus its work. But don't be afraid to deviate from the plan if you think of a better idea or want to do more!

Set Goals

1) Pick realistic goals based on the skill and experience-level of your team. Sample goals: Learn proportional control, complete 50% of the missions, build using pneumatics, use gears, etc.

Tip: A beginner team may/may not be able to mimic a team they have seen on YouTube. Be realistic.

Select Missions

2) To pick missions, teams should consider the point value, difficulty level, risk level and the time a mission takes. Also think about your team's skill level, etc. See chart below for questions to think about.

Tip: Picking missions that match your goals and making them work reliably is often higher scoring, more educational, and more fun, than attempting every mission and having them work poorly.

Plan Runs

3) Each time you go out of base, you go on a "run". You should try to group your missions together into runs so that you will be more efficient.

Tip: You can use the EV3Lessons Interactive Sketch Planner to map out your missions. You can also simply make a list of the missions that go together.

EV3Lessons has created a Strategy Deck - cards to help your team determine which missions to work on. You can move the cards around as you group the missions and decide what order to do them in.

Criteria	What to consider
Point Value	• Take a close look at the game and the point values • What missions maximize your points? What missions don't give you as many points, but are a lot more effort?
Difficulty Level	• Examine the mission models closely and see how they work. • What missions are easier to accomplish or harder (are they hard to get to, hard to activate/lift)?
Risk Level	• How many points do you lose if that run fails? Does it affect later missions? • Determine how risky a run is. Completing every mission in a single run is fun, but also risky.
Time	• Having trouble fitting your runs into 2min 30sec? Analyze where the time goes. • Does your robot have to travel back and forth a lot? Could you have completed missions during the same run before returning to base? Does your robot go to the same part of the mat multiple times? • Do you spend a lot of time in base? If you build an attachment for one mission, can it be used on another one too?