



CREATE Open Program - FAQ 2017-2018

Q1: What does it cost to register a CREATE Open team?

A: Nothing. Registration of a CREATE Open team for the 2017-2018 season is free.

Q2: Why do robots have to start from an off position when doing skills?

A: We want to reward systems that are able to function quickly and efficiently in all aspects of operation. That includes “booting” up. The Open is an advanced competition, and as such, understanding and optimizing all aspects of a robots operation is important.

Q3: Why are robots limited to 2 pneumatic tanks?

A: These components often represent a large outlay of money. It is our hope with the CREATE Open Program to have as level a playing field as possible. We want to promote extreme design flexibility AND low cost. Limiting the use of expensive parts is consistent with that philosophy.

Q4: When entering autonomous mode in a match is it legal to select from multiple autonomous modes via controller input (i.e. pressing a button.)?

A: Yes. Not only is it legal it is highly encouraged. The ability to select an appropriate autonomous should add a good deal of strategy and creativity to the CREATE Open.

Q5: If our robot does not have an autonomous mode may we keep the remote in our hands?

A: No. This would give a competitive advantage and thus reward a team that is less innovative in the programming area. This would be inconsistent with CREATE's philosophy of promoting innovation.

Q6: Is it legal to stay in autonomous mode longer than 20 seconds?

A: Yes. A team may play an entire match in autonomous mode if it likes.

Q7: Is an autonomous mode required?

A: No.

Q8: Can any motors be used?

A: Yes. However safety is a primary concern. Great care must be used to selecting appropriate motors and electronics that safely operate within the power requirements (9.6V) of this program. Any robot

deemed to be unsafe, for any reason, by the inspectors/referees will not be allowed to compete until modified to be deemed safe and/or may be disqualified from the tournament.

Q9: Can any control system be used?

A: Yes. This includes, but is not limited to, FIRST robotics equipment, LEGO, VEX or Arduino based systems.

Q10: Can any sensor be used?

A: Yes. It is also encouraged. There are great, low cost sensors, available which can be integrated into almost any control system.

Q11: Is one control system recommended over another?

A: No. Use what you are comfortable with/capable of. However some consideration should be given to flexibility and openness. The more open the control system the wider range of options for motors, sensors and integration of those you will have. Also, some control system like Arduino based systems have large worldwide communities that both support and innovate around that platform. Whichever control system you choose be sure it can safely operate at 9.6V.

Q12: The “xyz” control system that I bought as part of a kit does not “boot” up as fast, nor execute commands as quickly as some other open source control systems. Why?

A: Most control systems that come integrated with kits have the desired goal to reduce the complexity of programming. This is done to reach as large an audience as possible and is a great way to get introduced to robotics. This simplification however is done by laying 2-3 layers of code onto the control systems and remotes. These layers of code are usually unknown to the end user and are not accessible by them. One of the things all these layers of code do, in addition to simplifying the programming, is to increase, sometimes dramatically, the number of instructions required to perform a task. Open source systems do not have these additional layers. They are often harder to program, but are much “cleaner” in operation. As it is often with engineering, these are trade offs that need to be taken into account.

Q13: What ages/grades can participate in the CREATE Open program?

A: Any age. However, most events will be geared toward 12th grade and younger. The Open is an advanced robotics program. However middle school teams that feel qualified are welcome to participate with the high school teams.

Q14: How do I register a team?

A: Go to www.robotevents.com and register like you would a regular team. Just be sure to select CREATE Foundation as the “type” of team.