## **Citadel Lego Robotics Mystery Competition**

For this competition, teams will bring a basic robot chassis to the competition. On the morning of the competition, the challenge will be revealed. Teams will then have two hours to design, program, test, and modify their robots to complete the challenge.



## **Robot Design**

- The chassis cannot exceed 12"×12"×12"
- No more than 3 motors may be used
- Only one processor may be used
- The robot must be completely autonomous
- Any standard Lego sensors may be used (light, touch, ultrasonic, color, sound)
- Any unmodified Lego pieces may be used
- Only Lego bricks may be used in the design of the robot

## **Competition Schedule**

- 8:00 Registration: all teams must register their teams and have the dimensions of their robots checked at the registration desk. All team members must be present.
- 8:30 Reveal: competition rules will be distributed followed by a brief question and answer period.
- Design: teams must bring their own computers to program their robots and may begin to use the playing fields to test their designs. Any mechanical and programing changes may be made to the robot during this time as long as the robot does not exceed the maximum dimensions stated above. Playing field availability will be on a first come-first served basis, but no team is allowed to spend more than 5 minutes on a playing field at a time if another team is waiting to use the field.
- 11:00 Competition: all teams must be in the competition area with their robots ready to compete. Further modifications to the robots are not permitted once competition begins.
- 12:00 Awards Ceremony

## Some links for basic chassis ideas:

http://nxtprograms.com/index.html

http://www.fllcasts.com/course sections/6

