Teams will compete to show their skills in designing and operating a LEGO robot.

What to bring:
- RCX, NXT, or EV3 LEGO robotics kit
- Batteries for the robot
- Laptop/tablet to program the robot

This challenge is open to teams of 2 to 6 people.

Competition Instructions:
Bring your team’s robot in disassembled form. All teams will start with a disassembled robot.
Basic building plans will be provided or you can use your own. Every team will have the same amount of time to assemble their robot.
Each team will be charged to run a basic set of tasks; guideline will be provided on the day of the event.

Make sure your team can program a robot to:
- Maneuver back and forth
- Maneuver around an object
- Do the above tasks while keeping the robot in a confined space
### Judging:
Teams will be scored on robot design, successful programming for tasks, and teamwork.

### Sample Rubric:

<table>
<thead>
<tr>
<th><strong>Teamwork</strong></th>
<th><strong>Design</strong></th>
<th><strong>Programming</strong></th>
<th><strong>Innovation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A single member or a couple of members did almost all or all of the work</td>
<td>Team used existing design with no significant changes</td>
<td>Team lacked understanding to achieve basic robot performance</td>
<td></td>
</tr>
<tr>
<td>Most members had some involvement</td>
<td>Team used their own design or modified an existing design with some success</td>
<td>Team understood basic programming and achieved some tasks successfully</td>
<td></td>
</tr>
<tr>
<td>All members were equally, or close to equally, involved in at least some aspect of the project</td>
<td>Team used an existing design with significant modifications or a completely original design</td>
<td>Team successfully programmed robot to attempt or achieve all required tasks</td>
<td></td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td><strong>Notes</strong></td>
<td><strong>Notes</strong></td>
<td></td>
</tr>
</tbody>
</table>

---

**Design**

- Team used existing design with no significant changes
- Team used their own design or modified an existing design with some success
- Team used an existing design with significant modifications or a completely original design

**Programming**

- Team lacked understanding to achieve basic robot performance
- Team understood basic programming and achieved some tasks successfully
- Team successfully programmed robot to attempt or achieve all required tasks

**Innovation**

---

**Notes**

---

Team successfully completed all required tasks

**Notes**

---