Start-A-Team Checklist

✓ Create a FIRST® Account ([www.firstinspires.org](http://www.firstinspires.org))
✓ Create a Team Profile
  o Invite Primary Contacts
✓ Check out available grants ([https://www.firstinspires.org/robotics/ftc/grants](https://www.firstinspires.org/robotics/ftc/grants))
✓ Pay Season Registration and Purchase Product
✓ Complete Youth Protection Screening (US/Canada Lead Coach/Mentors only)
✓ Invite Team Members
✓ Reach out to an [Affiliate Partner](http://www.firstinspires.org) to register for local events.
✓ Review Available Resources on the [Team Management Resources](http://www.firstinspires.org) page.

For a full walkthrough, check out our [Team Registration for Rookies](http://www.firstinspires.org).

Kit of Parts Options
Useful Things to Consider

Physical Space and Storage
- Classroom (the ability to push tables/chairs out of the way) or equally sized room with open floor
  - Countertops/tables to serve as workspace
  - During practice, tape a 12 ft. (3.66 m) x 12 ft. (3.66 m) square on the ground to serve as a field
  - Large Storage Cabinet (1 or 2, depending on how much material you have)
    - Should be able to lock
    - Look for cabinets that are roughly 6 ft. (1.82 m) tall and 3 ft. (0.91 m) wide

Safety Considerations
- Always keep a first aid kit in the workspace, including disinfectant and bandages. Bring it to events. Any accidents should be reported immediately to Mentors. Make sure there is a telephone in the workspace, in case of a more serious injury.
- Have a fire extinguisher in the workspace, and make sure that everyone knows where it is and how to use it.
- The workspace should be kept clean and uncluttered. Cords should be kept out of walking paths and tools and materials should be kept in a designated storage area when not in use.

Basic Tool List
- Dremel tool or disk sander
- Hex keys
- Hand drills
- Small screwdrivers
- Tape
- Tie wraps
- Wrench metric set
- Wrench SAE set
- Zip ties
Advance Tool List (building on the Basic Tool List. Some of these tools require a workshop to use)

- Allen wrenches/T Hex keys
- Ball hex screwdriver
- Band saw
- Bench grinder
- Belt sander
- Chain breaker
- Deburring tool
- Drill press (mini mill)
- Drum sander
- Glue station (only if there is an available ventilation method)
- Hack saw
- Hot air guns (for bending plastics)
- Jigsaw
- Metal file
- Needle nose pliers
- Nut driver
- Sheet metal bender
- Sheet metal brake
- Table/radial arm saw
- Tubing cutter
- Variable speed drill
- Vise

Electronics

- Laptop to run your development tool
- At least one power strip
# Beyond the Robot: Online Resources

## Overview Pages

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST® Webpage</strong></td>
<td></td>
<td><a href="http://www.firstinspires.org">www.firstinspires.org</a></td>
</tr>
<tr>
<td><strong>FIRST® Tech Challenge main page</strong></td>
<td></td>
<td><a href="http://www.firstinspires.org/robotics/ftc">www.firstinspires.org/robotics/ftc</a></td>
</tr>
<tr>
<td><strong>Regional Contacts Search Portal</strong> - Find your Regional FIRST contact.</td>
<td></td>
<td><a href="http://www.firstinspires.com/node/2546">http://www.firstinspires.com/node/2546</a></td>
</tr>
<tr>
<td><strong>Game Materials</strong> - Includes all the season materials, including the Game Manuals, link to the Forum, Forum Answered Questions, field instructions, and link to buy field element.</td>
<td></td>
<td><a href="http://www.firstinspires.org/resource-library/ftc/game-and-season-info">http://www.firstinspires.org/resource-library/ftc/game-and-season-info</a></td>
</tr>
</tbody>
</table>

## Getting Started

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<tr>
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<tbody>
<tr>
<td><strong>Starting a Team Resources</strong> - Includes step-by-step resources for starting an FIRST Tech Challenge team.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5281">http://www.firstinspires.org/node/5281</a></td>
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<tr>
<td><strong>Fundraising Resources</strong> - Includes resources for budgeting and fundraising, including grants and resources from the FIRST and FIRST Tech Challenge Fundraising Toolkits.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5406">http://www.firstinspires.org/node/5406</a></td>
</tr>
<tr>
<td><strong>Resource Library</strong> - The location of all FIRST and FIRST Tech Challenge Resources. Organized in “articles”, resources are grouped together by subject and can be saved to your personal Resource Library by clicking on the ♥ when signed in.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/1586">http://www.firstinspires.org/node/1586</a></td>
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</table>

## Team, Robots, and Technology!

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<tr>
<td><strong>Team Management Resources</strong> - Includes all the resources for mentors and teams on running the team: the Mentor Manual, fundraising, training, Engineering Notebook, preparing for competition, awards, and more.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5226">http://www.firstinspires.org/node/5226</a></td>
</tr>
<tr>
<td><strong>Robot Building Resources</strong> - Includes all the resources for building the robot, including the Basic Bot Build Guides, Robot Wiring Guide, PTC design resources, and new technology resources.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5181">http://www.firstinspires.org/node/5181</a></td>
</tr>
<tr>
<td><strong>Technology Resources</strong> - Includes all resources for the android-based technology, including programming resources, Troubleshooting Guides, link to the Forum, etc.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5291">http://www.firstinspires.org/node/5291</a></td>
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</tbody>
</table>

## Competition

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<th>Resource</th>
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<tbody>
<tr>
<td><strong>Preparing for Competition Resources</strong> - Includes a checklist of items and resources to ensure your team is prepared for competition.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5261">http://www.firstinspires.org/node/5261</a></td>
</tr>
<tr>
<td><strong>Events Search Portal</strong> - Find local events (from tournaments to workshops and scrimmages).</td>
<td></td>
<td><a href="http://www.firstinspires.org/team-event-search">http://www.firstinspires.org/team-event-search</a></td>
</tr>
<tr>
<td><strong>FIRST Tech Challenge Dean’s List</strong> – Every registered FIRST Tech Challenge Team is able to nominate 2 students (10th or 11th grade) to be recognized for their leadership and dedication to FIRST. Learn more about this amazing award!</td>
<td></td>
<td><a href="http://www.firstinspires.org/robotics/ftc/deans-list">http://www.firstinspires.org/robotics/ftc/deans-list</a></td>
</tr>
<tr>
<td><strong>Volunteer Resources</strong> - Includes all volunteer training manuals and instructions for accessing the Schoology training.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5146">http://www.firstinspires.org/node/5146</a></td>
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## Outreach and Social Media

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<tbody>
<tr>
<td><strong>Outreach &amp; Marketing Resources</strong> - Includes resources and links to resources, virtual badges, marketing materials and team recruitment resources.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5246">http://www.firstinspires.org/node/5246</a></td>
</tr>
<tr>
<td><strong>Links to Social Media</strong> - All FIRST and FIRST Tech Challenge Social Media pages.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/4511">http://www.firstinspires.org/node/4511</a></td>
</tr>
<tr>
<td><strong>World Championship Results &amp; Hall of Fame</strong> - Location of all previous World Championships winners.</td>
<td></td>
<td><a href="http://www.firstinspires.org/node/5356">http://www.firstinspires.org/node/5356</a></td>
</tr>
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</table>
Beyond the Competition

**FIRST® Class** – This curriculum provides authentic, real-world learning to students by bringing FIRST® Tech Challenge into the classroom. The curriculum is designed to be a stand-alone robotics/programming/engineering course for grades 7-12 but also follows a timeline to allow students to be competition ready if they choose.

[http://info.firstinspires.org/ftccurriculumrequest](http://info.firstinspires.org/ftccurriculumrequest)

**FIRST Diversity & Inclusion** – FIRST® is committed to Diversity and Inclusion. Learn more about what this means for you and your team as well as gain access to free training, additional resources, and so much more!

[https://www.firstinspires.org/about/diversityinclusion](https://www.firstinspires.org/about/diversityinclusion)

**FIRST Scholarships** - Be proactive and start looking at over $80 million in scholarship opportunities available!

[http://www.firstinspires.com/scholarships](http://www.firstinspires.com/scholarships)

**FIRST Alumni & Internships** - FIRST participants can search out internships made available for students who have participated in high school level FIRST programs. Network on the FIRST Alumni page and ensure you are always connected even after graduating from FIRST Tech Challenge.

[http://www.firstinspires.com/alumni](http://www.firstinspires.com/alumni)

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**Additional Blogposts that help new teams**

- Engineering Notebook Overview
- How to Prepare for an Event
- Invisible Inequities Training: Toward a Bias-Free FIRST Front-Line?
- What to expect at a FIRST Tech Challenge event