

# Starting an FRC team in Australia

The FIRST Robotics Competition (FRC) is incredibly exciting and challenging, but requires significant effort and commitment. We're really excited that you're thinking about starting a team.

As well as this document, we suggest you read the US FIRST introductory doc and its various links: [Start a FIRST Robotics Competition Team](#) and then contact us to discuss your team. We would like to help to make your team a success.

## Team structure

The FIRST recommendation is a minimum of two adult mentors and ten students. While it is possible to start with fewer than this, it is important that your team has a clear plan for dealing with the typical forms of attrition - students ageing out, mentors changing jobs, another team forming, etc. If you are a school team, please try to get strong and ongoing support from your head of school - it really does make a difference.

## Costs

The 2024 season registration is USD6000 for all teams. This includes:

- A "Kit of Parts" including a robot base, motors, gears and various other items. You must take these in your first year, but you can opt out in future years.
  - New for 2024: The Kit of Parts should be sufficient to attempt all of the challenges from this year's game.
- A "Rookie Kit" for first year teams that includes critical electronics components - reused each year.
- A "Season box" containing sample game elements and other useful items from this season
- Entry to the FRC Regional, usually held in March in or around Sydney.
- The ability to register for off-season events. [In 2023, we had one in Sydney, one in Melbourne and one in Perth.](#) Registration for these events is typically low or no cost.

A new robot must be built from scratch for each season, and the Kit of Parts includes sufficient items to build a basic robot base when you include the electronics from the Rookie Kit. You may need to add mechanical and electrical elements if you want to attempt the more complicated challenges of this season's game (released in early January).

As well as registration, teams will need to organise:

- A place to work on the robot - ideally somewhere that has low setup time each meeting - a dedicated part of a workshop or similar is ideal.
- Tools - at least basic hand tools - screwdrivers, drills, hammers, saws.

- Materials - plywood, perspex, nuts, bolts, screws.
- Components - some items can be purchased from suppliers and teams can make a buy/build/hybrid decision.
- Storage - robot bases, motors, materials, game elements and test field structures all need storage space. Planning this early and labelling items makes future seasons easier.

At a minimum, teams should expect AUD10,000 per year to cover registration (the USD6000 above) and basic robot materials. Some of the registration costs may be offset by sponsorship grants (see Funding below).

Teams will also need to fund:

- Transport to the events - regionals tend to be three day events, other events two or three days
- Accommodation and meals for the events

## Funding

FIRST Australia works closely with industry to arrange sponsorship for the team and the events. As this sponsorship money is limited, we direct it to the teams with the greatest need. Some industry sponsorships are conditional on a member of the sponsor's team mentoring the team - this is a great experience for teams and can lead to deep, long-term relationships and potentially ongoing funding.

Rookie teams are able to apply for a "New Team Grant" from US FIRST. This covers the majority of the registration cost for the first year and roughly a third of the registration cost for the second year. It is important for teams to write a three year team plan that includes initial student and mentor numbers, how new students and mentors will be attracted to the team and how they will obtain funding for second and later years. This does not need to be highly detailed, but a solid plan helps to support the application for a grant as the team is more likely to be seen as viable.

FIRST Australia does not handle payment for teams. Once any grants have been finalised, these will appear in the team's US FIRST dashboard.

## Registration

All teams need to be officially registered with US FIRST at: <https://firstinspires.org/register> Once a team has provided the appropriate details they will be provided with a temporary team number - please let us know this number as soon as you know it. Once the team has committed funds

for the upcoming season, they will receive an official FRC team number for this and subsequent seasons. Once again, please let us know once you get this number.

## Payment

It is advisable to hold off payment until grant status, including any New Team Grant, is known. I.e. register, apply for grants, and then pay any remaining balance once the outcome of the grants are determined. Teams need to have a “Commitment to Pay” prior to the equipment ship date, which for Australia is late November of the year prior to the season but they should register as early as possible.

## Support

Remember - you're not on your own. There are many ways to get support during the season, and you should definitely make use of them! Start with the following:

- The FIRST Australia web site: <https://firstaustralia.org/>
- The [FRC Australia Slack Workspace](#). This is a forum for Australian FRC teams.
- The Compass Alliance: [www.thecompassalliance.org/](http://www.thecompassalliance.org/) - an International “Help Desk” for FRC teams, run by top teams from around the world. It's run 24x7 during Build Season.
- Chief Delphi: [www.chiefdelphi.com](http://www.chiefdelphi.com) - An International forum for all things FRC.
- Other Teams: Often the most powerful support can come directly from connections with other teams. Feel free to approach veteran teams with questions or requests for help.

## More detail

Much more detail can be found at:

- <https://www.firstinspires.org/robotics/frc/start-a-team>
- <https://firstaustralia.org/programs/first-robotics-competition/>
- <https://firstaustralia.org/register-a-team/>

## Contact us

If you have any questions, please feel free to contact us at: [first.australia@mq.edu.au](mailto:first.australia@mq.edu.au)

Updated 14 November 2023