

Autodesk <> FIRST Robotics | Getting Started Guide

A Fusion onboarding resource for FRC teams

Updated: December 2024

Welcome to FRC Robotics! We are excited that you decided to use Autodesk Fusion for this competition. This document will show you how to set up your team for success using Fusion.

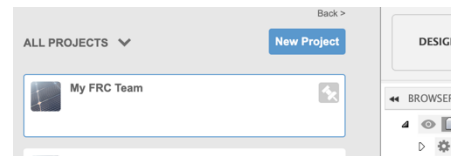
First, make sure your team has access to Fusion. You can get Fusion for free as a student from the [Autodesk educational access page](#). Choose “Student” and follow the steps if you need an educational license. If you already have a license, go to <https://manage.autodesk.com/products> and download Fusion.

On <https://www.autodesk.com/education/competitions/first>, we have several resources for you, including access to the FRC Kit you will need to use. It contains the Field, a Kitbot, and three containers for the different parts you need. Download the zip file under Download the kit and unzip it. You will find five F3Z files, which contain all the CAD models you need.

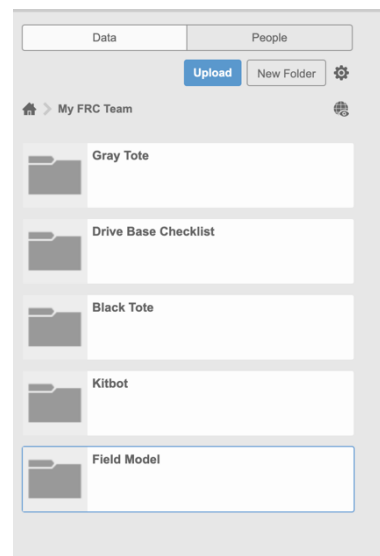
Note: these parts will also be found in Fusion itself under Samples. To add these to your hub, open each part and save into your hub, which will take more time than the flow explained below.

Instructions for Team Lead:

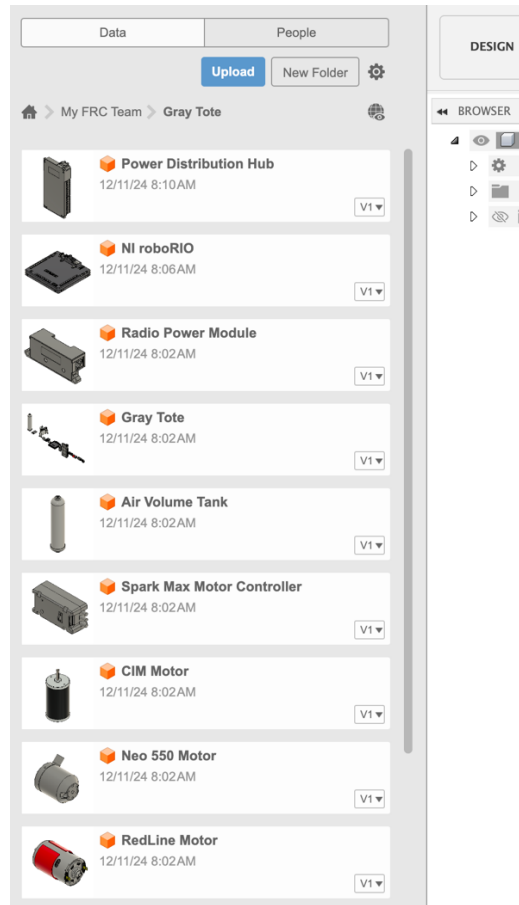
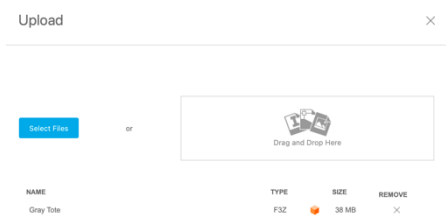
Open Fusion, go to Data Panel and create a Project for the FRC competition.



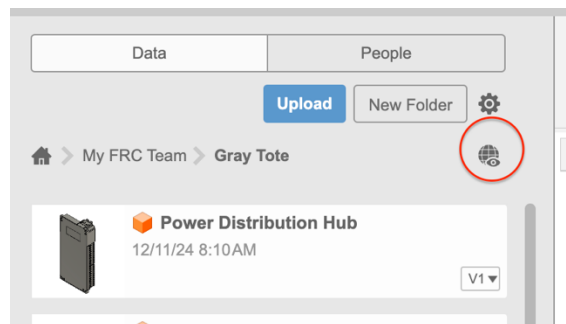
Once in it, we suggest you create five folders to contain each of the parts for the competition. This will ensure a better organization.



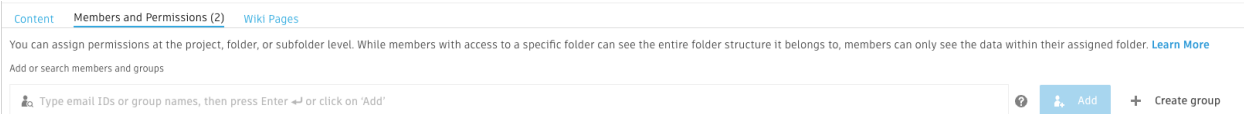
Under each of the folders, upload the corresponding F3Z file, and you will see the full set of parts populates the Fusion Data Panel.



Now, invite the rest of the team to your hub. Click on the icon on the red circle (see image) and you will go to your Fusion web client to manage your hub.



Add members to the main project by going to Members and Permissions and clicking Add.



At this point, you will need to also assign permissions to each member. If you think that there's no need to edit the parts provided, you can set permissions for the rest of the members as "Readers", which will allow them to download and copy but not edit the original parts. If you want the members to be able to edit, set them as Editor. As team lead, you can either be the only Admin or set someone else as Manager (can do mostly everything except deleting models) or Administrator (will have same powers as you).

Note that you can set permissions per folder. So, someone can be Editor on a folder (e.g., Field) and Reader on the folders for the original parts.

Directly applied role

Select ^

- Viewer
View (Files, folders, comments and people)
- Reader
Viewer + open with desktop, download and copy
- Editor
Reader + edit, upload, rename, move and delete
- Manager
Editor + manage members and set access levels
- Administrator
Manager + can delete items forever
- No role
No permission

And that's it. Your whole team is now ready to use Fusion and have a great time at the FRC competition. If you have any questions, feel free to use the Autodesk support forum – [Fusion Product forum](#) (best for Fusion-specific questions), and the [Students & Educators Community forum](#) (best for access and licensing-related questions). If needed, your peers and Autodesk employees will be delighted to help.