

## 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.

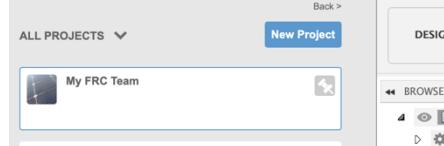
First, make sure your team has access to Fusion. You can get Fusion for free as a student from the [Autodesk educational access page](#). Choose “Student” and follow the steps if you need an educational license. If you already have a license, go to <https://manage.autodesk.com/products> and download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

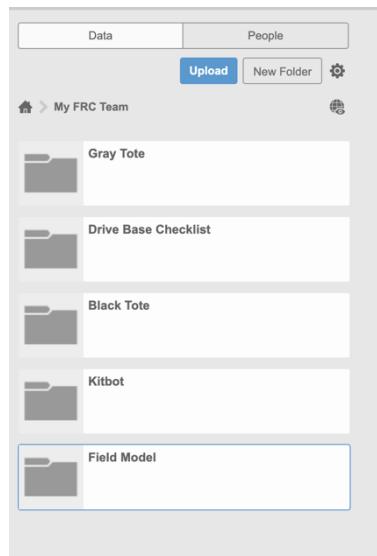
Note: these parts will also be found in Fusion itself under Samples. To add these to your hub, open each part and save into your hub, which will take more time than the flow explained below.

### 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.**

Part	Date	Version
Power Distribution Hub	12/11/24 8:10AM	V1
NI roboRIO	12/11/24 8:06AM	V1
Radio Power Module	12/11/24 8:02AM	V1
Gray Tote	12/11/24 8:02AM	V1
Air Volume Tank	12/11/24 8:02AM	V1
Spark Max Motor Controller	12/11/24 8:02AM	V1
CIM Motor	12/11/24 8:02AM	V1
Neo 550 Motor	12/11/24 8:02AM	V1
RedLine Motor	12/11/24 8:02AM	V1

**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.**

Content    Members and Permissions (2)    Wiki Pages

You can assign permissions at the project, folder, or subfolder level. While members with access to a specific folder can see the entire folder structure it belongs to, members can only see the data within their assigned folder. [Learn More](#)

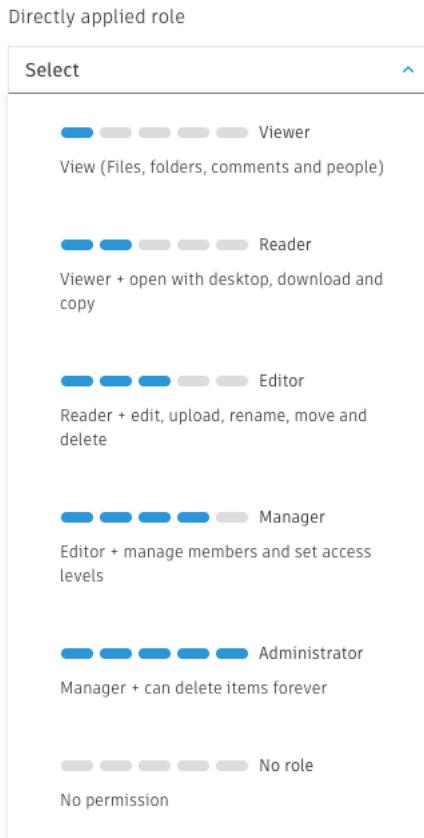
Add or search members and groups

Type email IDs or group names, then press Enter ↵ or click on 'Add'

Add    Create group

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.



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.