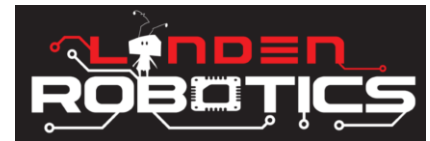


LINDEN ROBOTICS

FRC-3568 Linden RoboEagles

FTC-7031 Linden Battle Blazers

Autodesk Fusion 360 Training

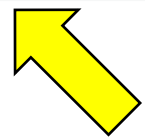


We need to thank our FIRST sponsor -



**AUTODESK[®]
FUSION 360[™]**

autodesk.com/education/competitions/first



AUTODESK®
FUSION 360™

AUTODESK. 🛒 🌐 US 👤 Sign in

Products ▾ Support ▾ Learn ▾ Community ▾

EDUCATION / STUDENTS EDUCATORS ADMINISTRATORS LEARN LAB GET HELP


EDUCATION COMMUNITY FIRST ROBOTICS

Inspiring young people to become science and technology leaders


FEEDBACK

Resources for teams


Design and test before you build your robot.



Use the kit
Learn how to use Autodesk Fusion 360 to design your robot in CAD



Free software for design
Autodesk software is available for all students, teachers, and mentors



Test with Synthesis
Use simulator technology to test and experiment with your robot models



AUTODESK® FUSION 360™

AUTODESK.

🛒 US Sign in

Products ▾ Support ▾ Learn ▾ Community ▾

EDUCATION / STUDENTS EDUCATORS ADMINISTRATORS LEARN LAB GET HELP

Resources for teams

Design and test before you build your robot.



Use the kit

Learn how to use Autodesk Fusion 360 to design your robot in CAD

[Download the kit](#) >



Free software for design

Autodesk software is available for all students, teachers, and mentors

[Explore software](#) >



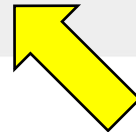
Test with Synthesis

Use simulator technology to test and experiment with your robot models

[Discover simulation](#) >

FEEDBACK

[→ EDUCATORS, ACCESS THE FUSION 360 FIRST CURRICULUM](#)





K[®]
360[™]

Individual Class/Lab

Filter by

All products (48) ▾

Platform



Sort by

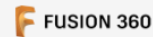
Featured A - Z



Simple 3D design and 3D printing app

Platform:

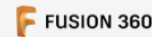
Get started >



Download Fusion 360
Cloud-based 3D CAD, CAM, CAE & PCB software optimized for desktops, and laptops

Platform:

Get started >



Browser access to Fusion 360
Note: this product requires access to Fusion 360.
Cloud-based 3D CAD, CAM, CAE & PCB software optimized for Chromebooks, inexpensive laptops, and lab installations

Platform:

Get started >



Plan, design, construct, and manage buildings with powerful tools for Building Information Modeling.

Platform:

Get started >



Revit Generative Design
Note: this product requires Autodesk Revit 2021.
Quickly generate design alternatives based on your goals, constraints, and inputs to give you higher-performing options for data-driven decision making.

Platform:



Software for 2D and 3D CAD.
Includes access to AutoCAD Architecture, Electrical, Mechanical, Map3D, MEP, Plant 3D and AutoCAD Raster Design

Platform:



Software for 2D and 3D CAD

Platform:



Professional-grade product design and engineering tools for 3D mechanical design, simulation, visualization and documentation

Platform:





AUTODESK®
FUSION 360™

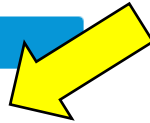
Sign in



Click on Create Account.

Email

NEW TO AUTODESK? [CREATE ACCOUNT](#)



Country = United States

Role = Design Competition
Mentor (if parent),
Student (if team member).

NOTE: Student must be
older than 13 to create
account (based on birth
year).

Institution = High
School/Secondary

Get Educational Access



Create an account or sign in. Then confirm your eligibility for educational access to Autodesk software and services.

Country, Territory, or Region of educational institution

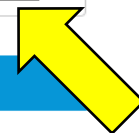
Educational role

[WHAT'S THIS ?](#)

Institution Type

Date of Birth

ALREADY HAVE AN ACCOUNT? [SIGN IN](#)



Get Educational Access



Create an account or sign in. Then confirm your eligibility for educational access to Autodesk software and services.

Country, Territory, or Region of educational institution

Educational role

[WHAT'S THIS ?](#)

- Educational role
- Student
- Educator
- School IT Administrator
- Design Competition Mentor

ALREADY HAVE AN ACCOUNT? [SIGN IN](#)



AUTODESK®
FUSION 360™

Verification required

Check your inbox and follow the link in the email to verify your account for:



DIDN'T GET AN EMAIL? [RESEND](#)

OR ALREADY VERIFIED? [CONTINUE](#)

Trouble with verification?
[SHOW HELP OPTIONS](#)

Verify your email address by clicking on the **Verify Email** button.

1:10 PM (0 minutes ago) ☆ ↶ ⋮



Your account for everything Autodesk

Hi,

Please complete your Autodesk account  by confirming your email address.

[VERIFY EMAIL](#)

If the link above doesn't work, click on the link below to verify this URL in your browser:

https://accounts.autodesk.com/443/user/verify?token=993e2ae6c3e371acc6aeb71f7157c50824e7a667&referrer=https%3A%2F%2Fwww.autodesk.com/resources%2Fadsk%2Ffc%2Foxygen%2Ftoedu2.do%2Fresponse.resp%3F_charset_%3Dutf-8&productname=&uftype=education

© 2021 Autodesk, Inc. All rights reserved.
Autodesk, Inc 111 McInnis Parkway San Rafael, CA 94903



AUTODESK®
FUSION 360™

< You're almost there.



Enter the information and click **Next**.

You will get confirmation that your account is setup and click **Continue**.

To confirm your eligibility for educational access to Autodesk products, we just need to know a little more about you:

Name of educational institution

Linden High School (Linden, MI)



Enrolled from date

August



2021



Expected graduation date

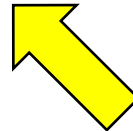
June



2022



NEXT

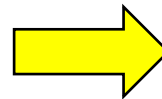


Account set

Your account is now updated to access the Autodesk education community



CONTINUE



Connect the entire project lifecycle with Autodesk software

Shop all products >



Click on **Shop All Products**, verify the information shown and click on **Confirm**. An error will appear, click on the **Uploading** link.



AUTODESK®
FUSION 360™

Toxic algae fouled the water supply. Arcadis designed a more resilient water system.

Get the essential CAD and BIM design tools in a

Build better with connected construction workflows

AUTODESK.
Check that your information below is correct, then click Confirm
All fields must be accurately completed to confirm your eligibility for educational access to Autodesk products. Thank you for helping us provide Autodesk tools for legitimate educational use around the globe.

Email [Redacted]

Wrong email address? [Update address](#)

First name [Redacted] Last name [Redacted]

Country or region of your educational institution: United States Institution type: High School/Secondary

Name of educational institution: Linden High School (Linden, MI) Date of birth: [Redacted]

CONFIRM > Cancel

Identity services powered by SheerID [SheerID FAQs](#)

[Privacy Statement](#)

Not enrolled or employed at a [Qualified Educational Institution](#)? [View alternate Autodesk software licensing options.](#)



Something's not quite right. We were unable to confirm your eligibility for educational access to Autodesk products. Please try again or proceed to confirm by [uploading a copy of documentation](#) issued to you by your educational institution as proof that you are enrolled or employed at a [Qualified Educational Institution](#).

All fields must be accurately completed to confirm your eligibility for educational access to Autodesk products. Thank you for helping us provide Autodesk tools for legitimate educational use around the globe.

Email: nmbonasse@gmail.com

Wrong email address? [Update address](#)

First name: Nathan Last name: Bonasse

Country or region of your educational institution: United States Institution type: High School/Secondary

Name of educational institution: Linden High School (Linden, MI) Date of birth: February 04 2006

TRY AGAIN > Cancel

Identity services powered by SheerID [SheerID FAQs](#)



Additional documentation needed

Please upload a copy of documentation issued to you by your educational institution (e.g. tuition receipt or student ID, employee ID) as proof that you attend, teach or are employed at a qualified educational institution

You have 14 days to upload your documentation

The document must include:

1. Your full legal name (**Nathan Bonasse**)
Note: The name on the document you submit must match this.
2. The name of the educational institution at which you are enrolled or employed (**Linden High School (Linden, MI)**)
Note: The school name on the document you submit must match this.
3. A date within the current school term.

Preferred documents include:

Transcript
School-issued confirmation letter
A copy of your student ID (photo ID not required)

Supported file types: JPEG, PDF, PNG, GIF

Drag documents here, or
[browse](#)

NOTE: If your uploaded document is blurry to read, does not show your full and legal name, or shows a name different from the one you used for this Autodesk account, you will not be able to complete the confirmation process. Please do not include any confidential information in the document you upload, such as social security numbers or banking details. Please ensure any sensitive information is blacked out before you upload your document.

SUBMIT

Cancel

Examples of preferred documents



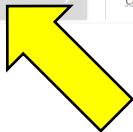
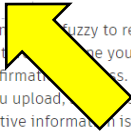
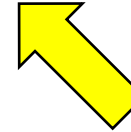
School Transcript
Transcript with full name of student, school name, and date



School-issued confirmation letter
School letterhead with full name of student or faculty member, school name, and date



School ID
ID badge with full name of student or faculty member, school name, and date, photo not required



AUTODESK®
FUSION 360™

You must provide proof of eligibility to download the software. To do this you must have one of the forms described above in the examples. Add the document (JPEG, PDF, PNG, or GIF formats only). Click **Submit**.

See example on next page.



Linden High School

7201 West Silver Lake Road – Linden MI 48451

PH: (810) 591-0410 FAX: (810) 591-8014
Darin Dreasky, Principal
ddreasky@lindenschools.org

August 30, 2021

This letter confirms that the students and mentors named below are members of the Linden High School Robotics Team in Linden, MI.

The above team members are active in the 2021-2022 FIRST Robotics Competition participating on the FRC-3568 Linden RoboEagles team.

Should you require any further information, you may contact me at Linden High School by calling (810)591-0410..

The information contained in this letter will be used by Autodesk and its vendors solely to verify team member eligibility to use Autodesk Educational licenses or subscriptions and in accordance with the Autodesk Privacy Statement.

- **FTC (middle school)**
- **Team 7031 Linden Battle Blazers**
 - Nathan Bonasse
 - Gavin Burton
 - Robert Gilmore
 - Michael Lajoice
 - Logan McDowell
 - Jackson Skene
- **FRC (high school)**
- **Team 3568 Linden RoboEagles**
 - Brayden Archambeau
 - Michaila Bonasse
 - Benjamin Bondroff
 - Wesley Ericksen
 - Theodore Farley
 - Ashton Howard
 - Ian Harvey
 - Ian Martin
 - Stella Martin
 - Ryen Padilla

Program Mentors

- John Bonasse
- Katie Bonasse
- Tabitha Bucknam
- Dennis Burton
- Robert Glover
- Scott Padilla

Yours sincerely,

Darin Dreasky
Principal



AUTODESK®
FUSION 360™



Thank you

CLOSE

Identity secured by SheerID [SheerID FAQs](#)

[Privacy Statement](#)

Once you have submitted the proof of eligibility use will be redirected to the screen above, click the **Close** button.

AUTODESK. Make anything

EDUCATION ACCESS

Welcome, Nathan!

You're eligible for free one-year educational access to Autodesk products through the Autodesk Education Community. Your access is valid through September 05, 2022, and you'll have the opportunity to renew if you are eligible.

To use any of the available products, visit the [Autodesk Education Community](#) and make your product selections. Now—let's start designing and making.

GET PRODUCTS >

Still have questions? We've got you covered.

Visit the [Autodesk Knowledge Network](#) for detailed instructions, or [contact support](#).

Best,
Autodesk

Autodesk, Inc. • 111 McInnis Parkway • San Rafael, CA 94903



**AUTODESK®
FUSION 360™**

Open your inbox and you should have received an email similar to the one shown to the left. Click on the **Get Products** button.

Sign in



Email

NEXT

NEW TO AUTODESK? [CREATE ACCOUNT](#)



Sign into your account.



AUTODESK®
FUSION 360™



Welcome

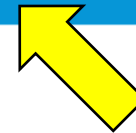


Password

[FORGOT?](#)

SIGN IN

Stay signed in





AUTODESK®
FUSION 360™

Protect your account

Set up an extra layer of protection with 2 step verification

With 2 step verification, you will need to enter a security code that is generated to your authentication app each time you sign in



It's free and you will enjoy a more secured experience. All it takes is a couple of minutes

GET STARTED

NOT READY? [REMIND ME LATER](#)

Click **Get Started** to setup two step verification. Either use an app as shown or click on **SMS** to receive a text with a verification code.

< 2 Step Verification

Make sure you have installed an authentication app such as [Duo Mobile](#) on your phone. Once this is done, simply figure by:

1. Adding a new token
2. Use the application to scan the QR code, or manually enter the key below



054DATCZGMVVCU2M

NEXT

GOT AN OLDER PHONE? USE [SMS](#) INSTEAD



AUTODESK®
FUSION 360™



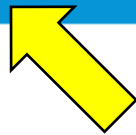
Expires in 4:57

Enter the security code sent to the phone number
ending with **536**



"6-digit code"

ENTER CODE



You're all set

Your account is now set up with 2 step verification



When you sign in the next time, you will need to enter a
security code sent to your phone number ending with **536**

CONTINUE

NEED CHANGES? [VIEW SECURITY SETTINGS](#)





AUTODESK®
FUSION 360™



You're Confirmed!

Congrats! We've confirmed that you're eligible for educational access to Autodesk products, and your account status has been updated.

Your access will last 12 months from your confirmation of eligibility date, after which you can renew if you are still eligible. Now let's start designing and making.

[GET AUTODESK SOFTWARE >](#)



FUSION 360

FUSION 360

Filter by

All products (48)

Platform



Sort by

Featured A - Z



AUTODESK® FUSION 360™

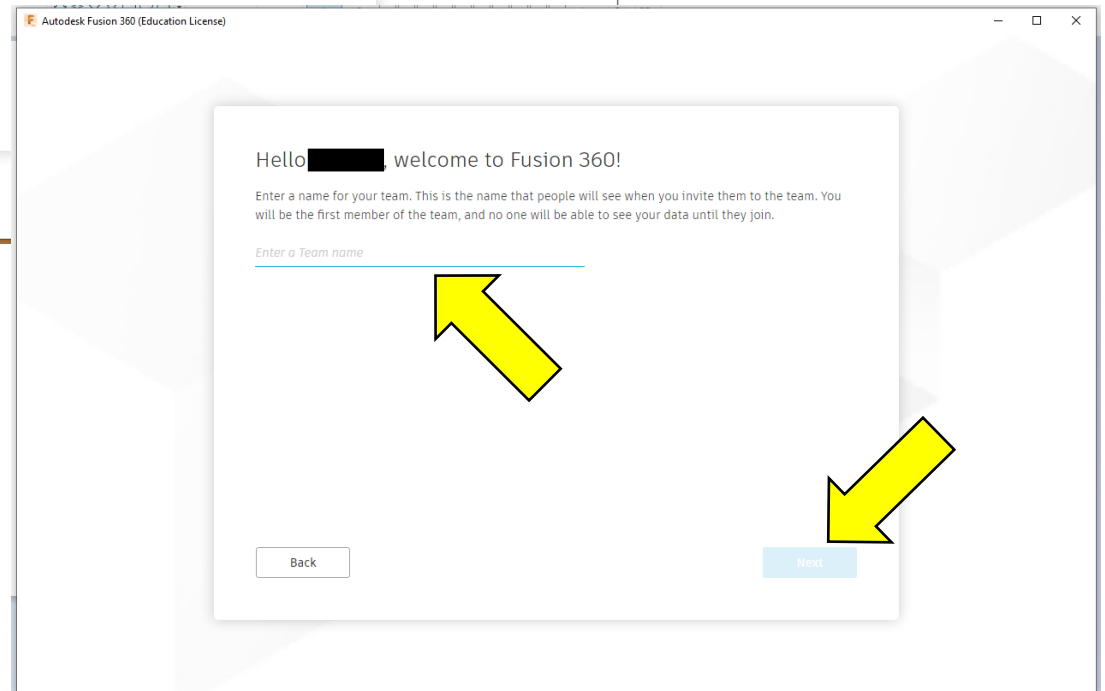
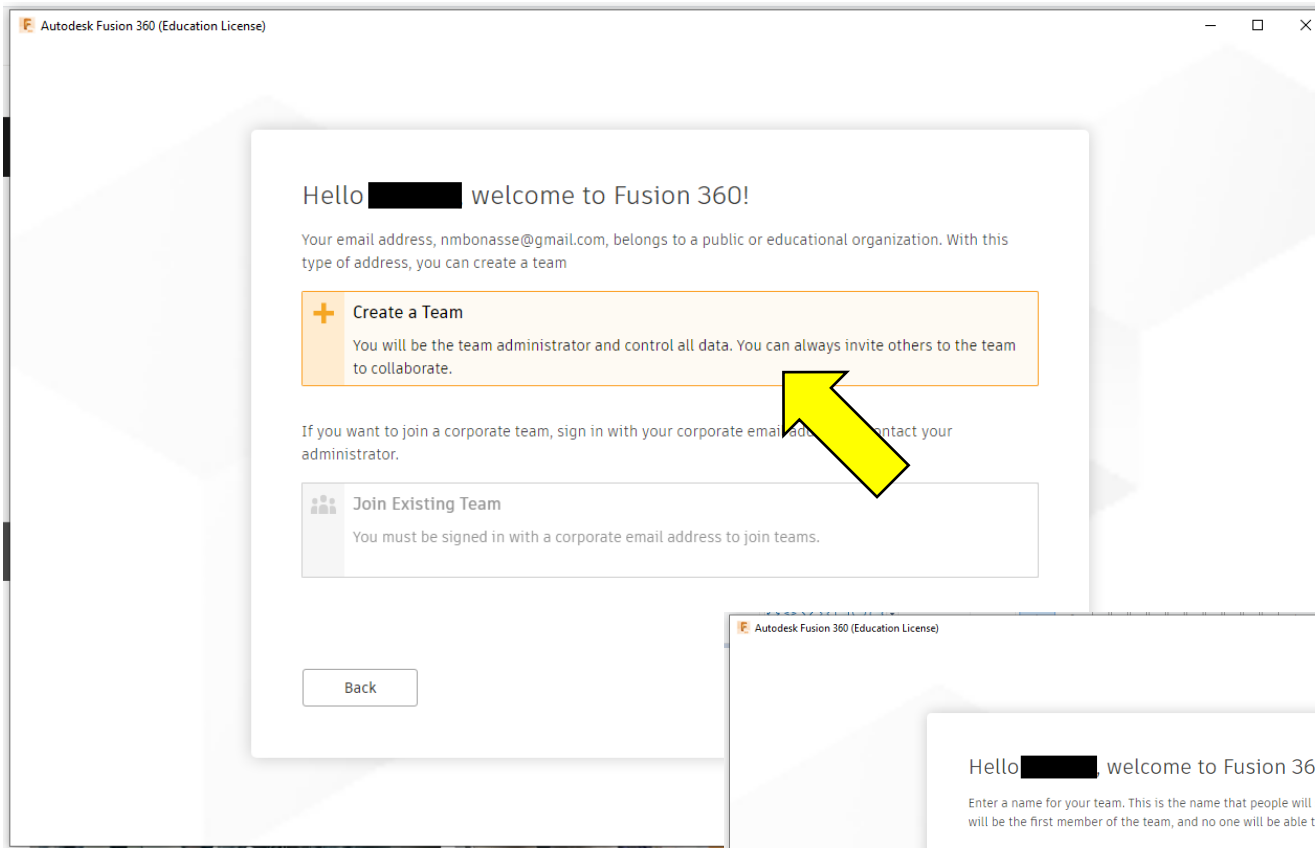
The screenshot shows a grid of product cards. The top row includes TINKERCAD, two versions of FUSION 360 (one for download, one for browser access), and REVIT. The bottom row includes REVIT, AUTOCAD, and INVENTOR PROFESSIONAL. A yellow arrow points to the 'Get product' button for the 'Download Fusion 360' card.

A close-up of the 'ACCESS' button for Fusion 360. The button is blue with the word 'ACCESS' in white and a right-pointing arrow. A yellow arrow points to the button.

Click on **Get Product** and **Access** to download the software. Once downloaded, run the .exe file to install Fusion 360.



AUTODESK®
FUSION 360™



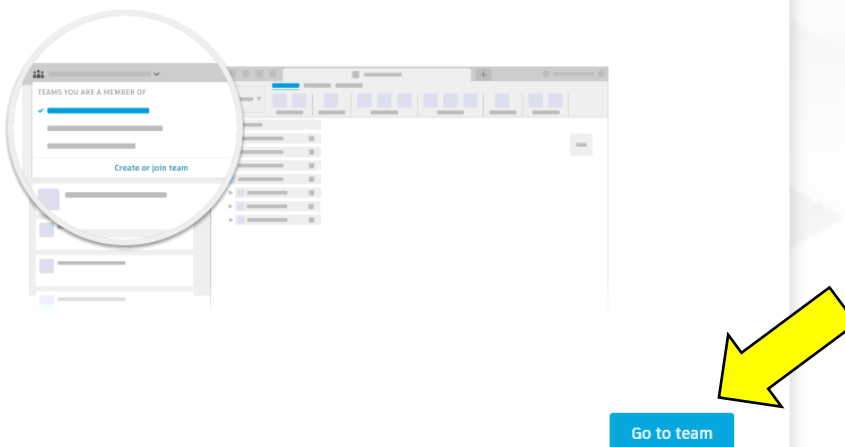


AUTODESK® FUSION 360™

Autodesk Fusion 360 (Education License)

Robotics 7031 is ready to use!

You can always create or join another team or switch between teams using the drop-down menu in the data panel.



Go to team



AUTODESK®
FUSION 360™

Congratulations!

Autodesk Fusion 360 should now be installed.

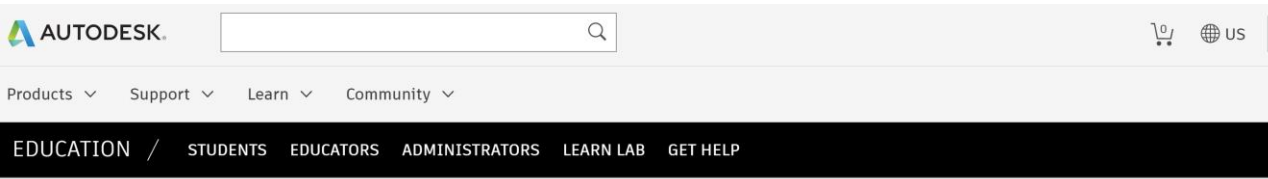
Next you will need to download the part files to be used in the program.
Click the links on the following page to get started.

Download the STEP Kit-of-Parts for Skystone as shown in the image.

(<https://www.autodesk.com/education/competitions/first#download>)

Individual parts can be downloaded from the AndyMark site when needed.

(<https://www.andymark.com/pages/resources-files?prefix=STEP%20Files/>)



AUTODESK® FUSION 360™

Additional resources

To support FIRST students in their design process, we have developed a kit of parts and field models in CAD.

[FRC 2020 kit of parts](#)

[FRC 2020 field model](#)

[FTC Skystone kit of parts](#)

[FTC Skystone field model](#)

[Fusion 360 kit of parts](#)

[Fusion 360 kit of parts](#)

[Inventor kit of parts](#)

[Inventor kit of parts](#)

[Inventor kit of parts](#)

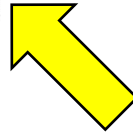
[Inventor kit of parts](#)

[STEP kit of parts](#)

[STEP kit of parts](#)

[STEP kit of parts](#)

[STEP kit of parts](#)

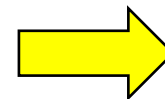


Autodesk Website [LINK](#)



Home / Resources / Help & FAQ / Documentation

Size	File/Folder
	../
0.1 k	
19.7 M	AM14U4_PNG6.STEP
37.7 M	AM14U4_PW48XL.STEP
37.3 M	AM14U4_PW4XL.STEP
55.2 M	AM14U4_PW68XL.STEP
54.6 M	AM14U4_PW6XL.STEP
13.2 M	EVO-4R-283-135-LH2 2 Stage 4 RedLine EVO Shifter.STEP
36.8 M	Launch Bot.STEP
235.2 k	am-0004 AMS Outside Plate REV5.STEP
210.5 k	am-0020 Dog Gear.STEP
150.4 k	am-0020d Three Tooth Dog Gear REV5.STEP
106.7 k	am-0021 Output Hex Shaft.STEP
892.3 k	am-0022 Large Output Gear, 48 Tooth.STEP
436.0 k	am-0023 35T 20dp Small Output Gear.STEP
677.8 k	am-0023 Small Output Gear, 35 Tooth.STEP
1.0 M	am-0024 40T 20dp 375h.STEP



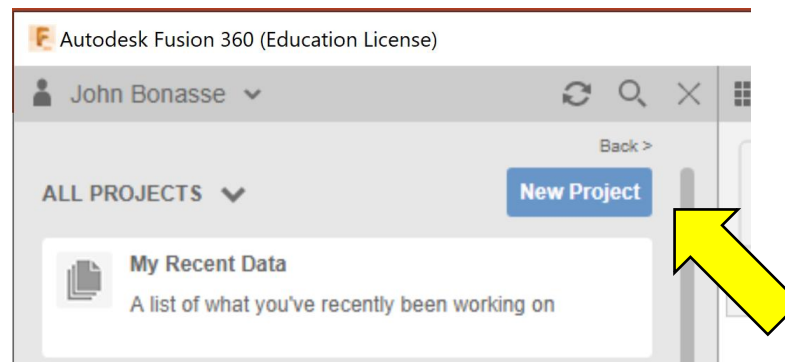
AndyMark Website [LINK](#)



AUTODESK®
FUSION 360™

Open the software. You may be prompted to sign into Autodesk (you will need internet access).

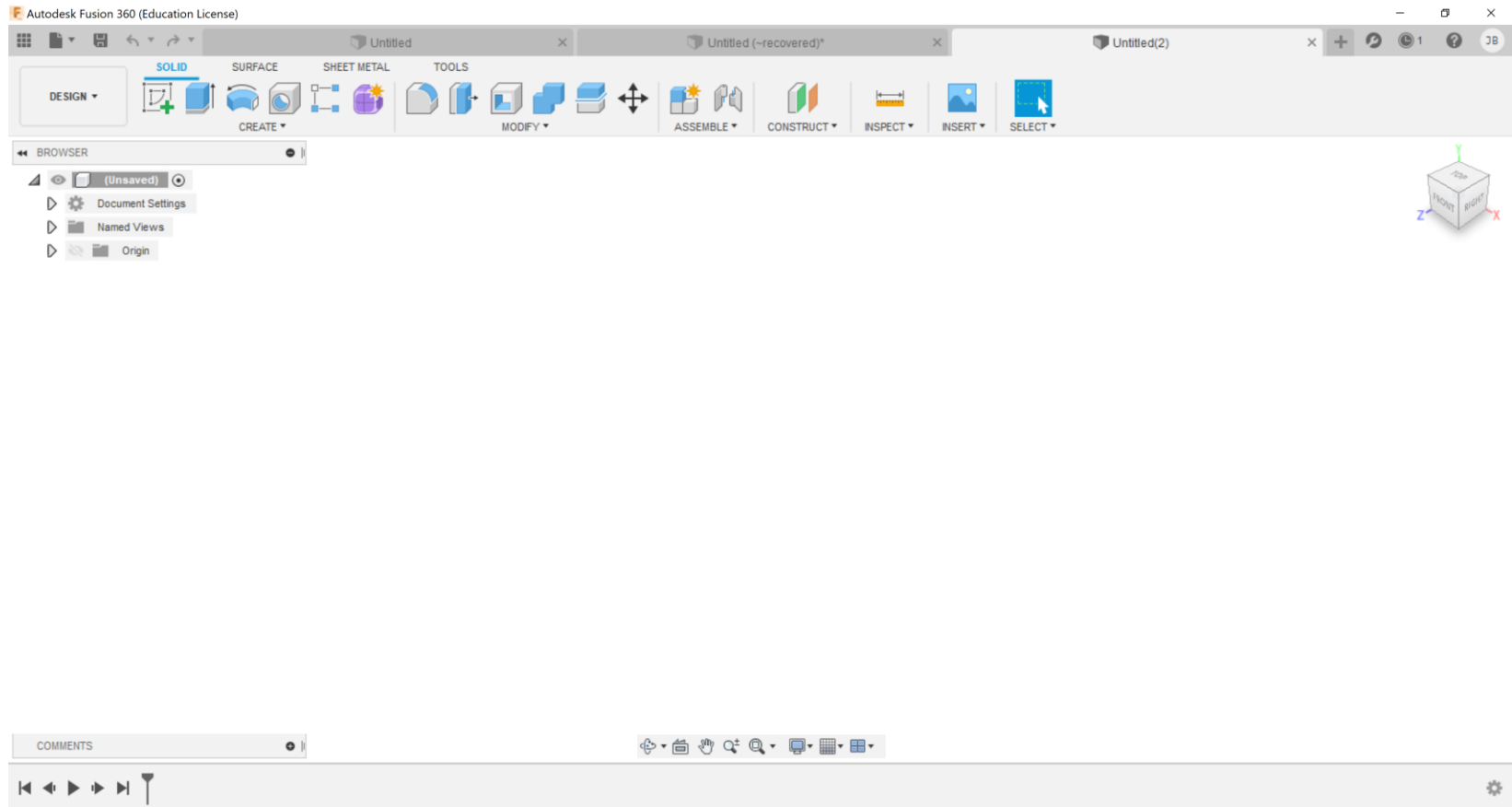
Click on **New Project** and name it “**FreightFrenzy**”.





AUTODESK®
FUSION 360™

Your PC screen should look similar to the one shown below
(Mac may look a little different).



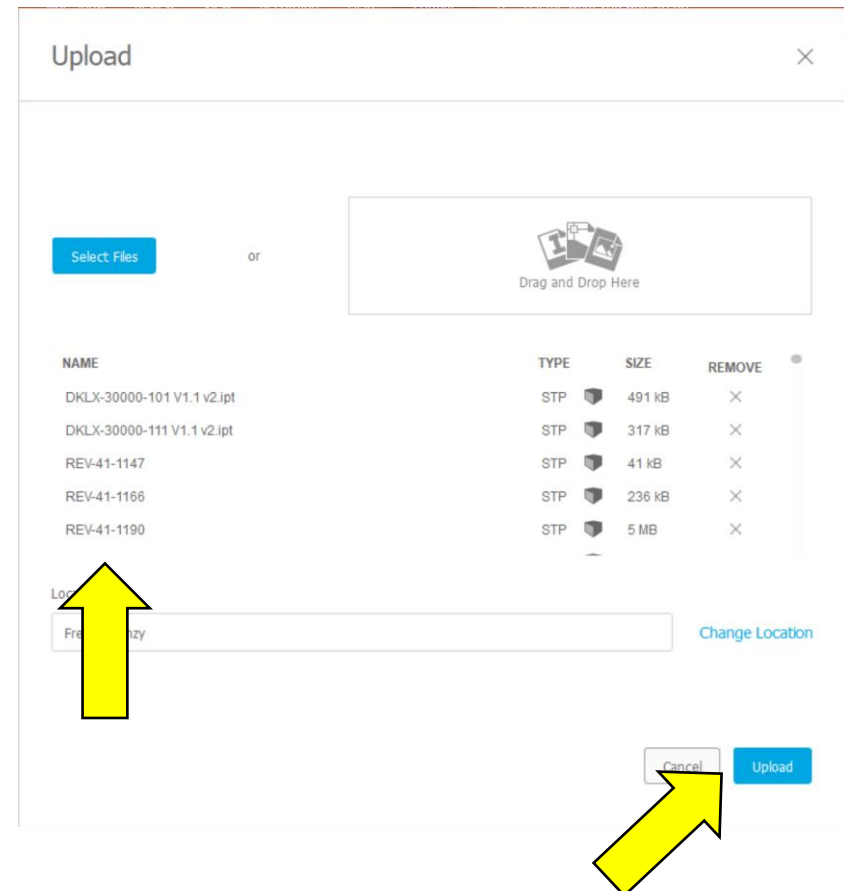
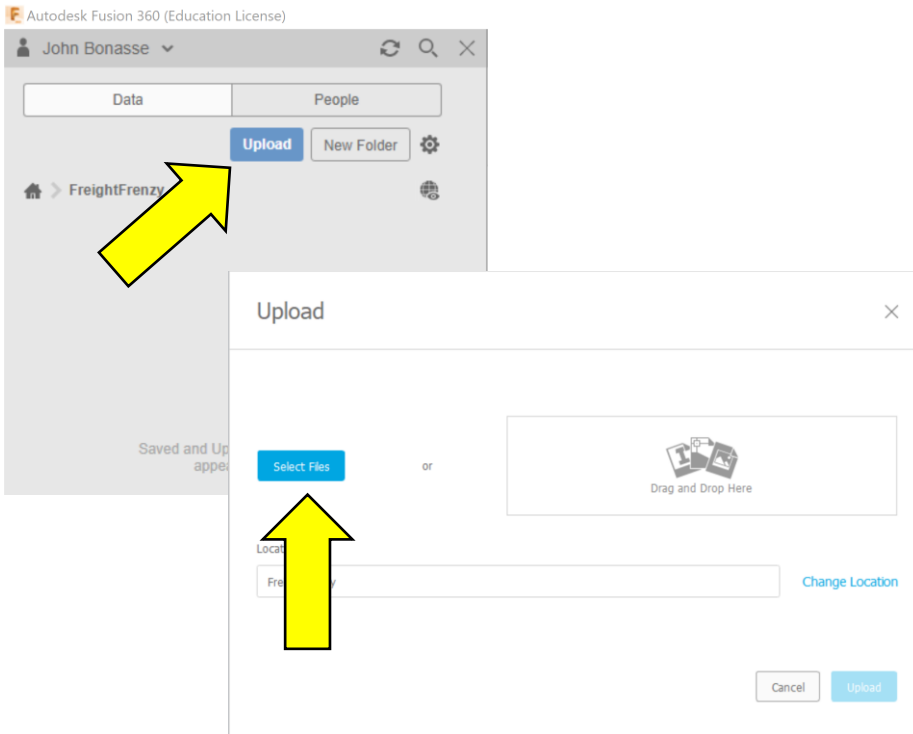


AUTODESK®
FUSION 360™

Let's get started

1 – **Upload** the STEP files into the project by clicking on the Upload button.

2 – Click on **Select Files** and choose the STEP files to add. File names will appear in the list and then click on **Upload**.





AUTODESK®
FUSION 360™

Let's get started

3 – Files will begin to load in the **Data Panel** on the left side of the display. Click the **Close** button when the upload is complete.

Autodesk Fusion 360 (Education License)

John Bonasse

Data | People

Upload | New Folder

DESIGN

SOLID | SURFACE | MESH | SHEET METAL | TOOLS

CREATE | MOVE

ASSEMBLY | COMPOSITE

FreightFrenzy

DKLX-30000-101 V1.1 v2.ipt 6:03:04 AM

DKLX-30000-111 V1.1 v2.ipt 6:03:04 AM

REV-41-1147 6:03:04 AM

REV-41-1166 6:03:04 AM

REV-41-1190 6:03:04 AM

REV-41-1303 6:03:04 AM

REV-41-1304 6:03:04 AM

REV-41-1305 6:03:04 AM

Job Status

Data | Generative Designs | Simulations

Name	Status	Action
Tetrix_44708.stp		Cancel
Tetrix_44260.stp		Cancel
REV-41-1190.stp		Cancel
REV-41-1343.stp		Cancel
REV-41-1354.stp		Cancel
REV-41-1353.stp		Cancel
Tetrix_39272.stp		Cancel

Close

COMMENTS

Upload progress