

Intro to Engineering

Grade: 10 - 12

Credit/Length: 1 hour for a full year.

Materials Needed:

iPad, iPad Pencil

Course Description:

In PLTW Introduction to Engineering Design, you will learn how engineers apply a design process to solve real-world problems. You will work individually and as a member of collaborative teams to apply math, science, and a variety of engineering tools, including 3D modeling software, to design, document, and communicate your engineering work. Many of the transportable skills you practice in this course—such as communication, collaboration, ethical reasoning, and process thinking—can be applied to your other courses and your future career!

Course Objectives:

- 1) Understanding the basics of design
- 2) Demonstrate the ability to solve problems
- 3) Determine how things work
- 4) Demonstrate thoughtful product Design
- 5) Learn 3-D Modeling and design.

Classroom Expectations:

- Prompt
- Present
- Prepared
- Participate
- Polite

Hybrid Learning:

- Complete work on Assigned Due dates. These will be added to Schoology
- Teacher will respond to emails during school hours.
- Schoology is the learning management system where you will receive all your assignments/tasks.

Virtual Learning: (This portion will be updated if virtual learning happens)

- Be prepared by keeping your iPad firmware up to date and charged.
- Check Schoology and Email daily
- TEAMS Etiquette:
 - Keep Microphone off unless speaking
 - Turn Camera On. I want to see your face
 - Locate yourself in a quiet space

- Use the Chat as a source of communication
- Make sure you have proper dress attire

Grading:

- Daily work, quizzes, tests, and Lab points are weighted the same.
- Student is accountable for getting makeup work when gone.
- Late work is accepted if done in a reasonable time and not done so repeatedly.
- Final grades will be calculated: Q1 50% and Q2 50%
- Check grades frequently making sure they are updated.

Additional Time:

If you need extra time to work on an assignment or project set up a time with me during class to work afterschool.

Communication: Don't hesitate to email or call me with any questions or concerns.

- Preferred communication tool is Email: bmackowick@west-fargo.k12.nd.us
 - Try not to use Schoology to send a message.
 - If your question is detailed and requires more than 2 emails about a topic please set up a call on TEAMS. You can visit Schoology for a link to my "Teams Office Hours"
- Check PowerSchool grades often to make sure students work is completed and correct.