

Grade 9-12

Distance Learning Module 2: Week of: 4/6/2020-4/9/2020

Foundations of Engineering - *Modified from* [Unit 1 – Engineering Design Process](#)

Targeted Goals from Stage 1: Desired Results

- Design Process: Describe and apply the design process to identify and solve a problem.
- Utilize the design process; including defining a problem, brainstorming, researching and generating ideas, identifying criteria and specifying constraints, exploring possibilities, selecting an approach, developing a design proposal, making a model or prototype, testing and evaluating the design using specifications, refining the design, creating or making it, and communicating processes and results.
- Students will develop an understanding of engineering design.
- Explore and hone techniques, skills, methods, and processes to create and innovate
- Demonstrate professionalism through exhibiting attentiveness, growing from feedback, and adhering to industry standards (safety).

Skills:

- Utilize the Engineering Design Process to develop a solution to a given challenge/problem.
- Express technical knowledge used in solving a problem in a clear, concise, and coherent manner within an engineering report.

Expectation: Students will learn about the engineering design process.

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: What is the difference between engineering and technology activity.	Creating a Venn diagram	-Complete and turn in Creating a Venn diagram
Tuesday: What is the difference between an engineering and engineering technician activity.	-Engineering vs. engineering technician video -Engineer vs. Technician exit slip	-Complete and turn in -Engineer vs. Technician exit slip
Wednesday: Introduction to the engineering design process activity	Engineering Design Process presentation Engineering Design Process “Notes Sheet”	-Participation in Engineering Design Process “Notes Sheet”

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Thursday: Complete engineering design process activity		-Complete Engineering Design Process “Notes Sheet” -Vote on your top 3 definitions for engineering and for technology.
Friday: NO SCHOOL (GOOD FRIDAY)		

Week criteria for success (attach student checklists or rubrics):

Creating a Venn diagram

Engineering Design Process “Notes Sheet”

Engineer vs. Technician exit slip

Supportive resources and tutorials for the week (plans for re-teaching):

Engineering Design Process presentation