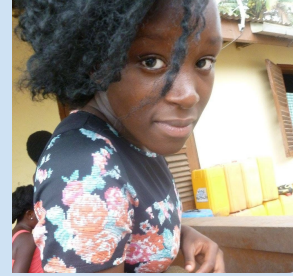


Introduction to Engineering!



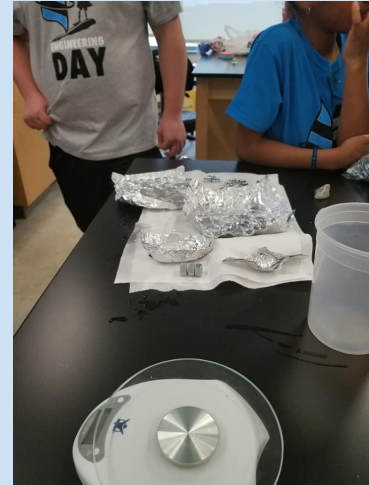
OLD DOMINION
UNIVERSITY



Destini Best, Makenzie Blackwell, Miranda Cooper,
Chanakarn Pensiri, and Nicolas Isidro

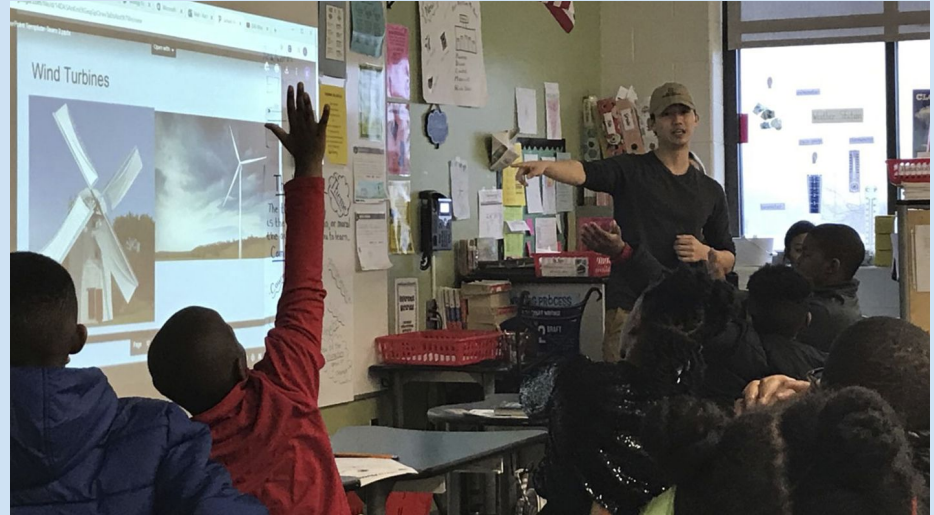
Why are we here?

Your class will participate in a hands-on,
engineering challenge lesson designed
by us on April 21st!



What are the ground rules for today's presentation?

1. Be respectful
2. Be ready to learn
3. Be prepared to participate
4. Be good listeners



Icebreaker: Have you ever? (Stand up if...)

For this activity the class will be split into two groups to share your name and one thing you like to do outside of school.

Stand up if...

1. You have ever been on a plane.
2. You know how to cook.
3. You like to go to water parks.
4. You have ever been on an elevator.
5. You know what a hot air balloon is.
6. You want to be an engineer when you grow up.

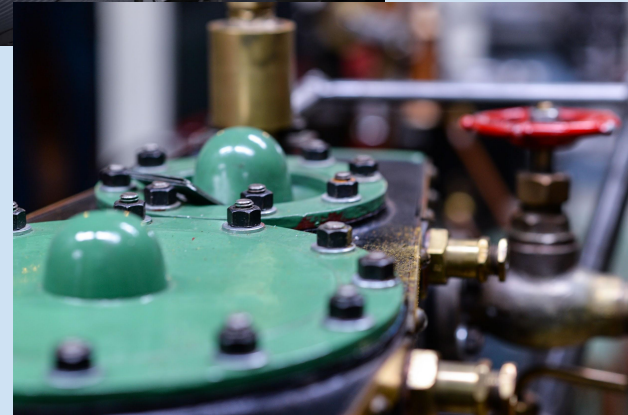


What kinds of projects are ODU Engineering Students involved in?

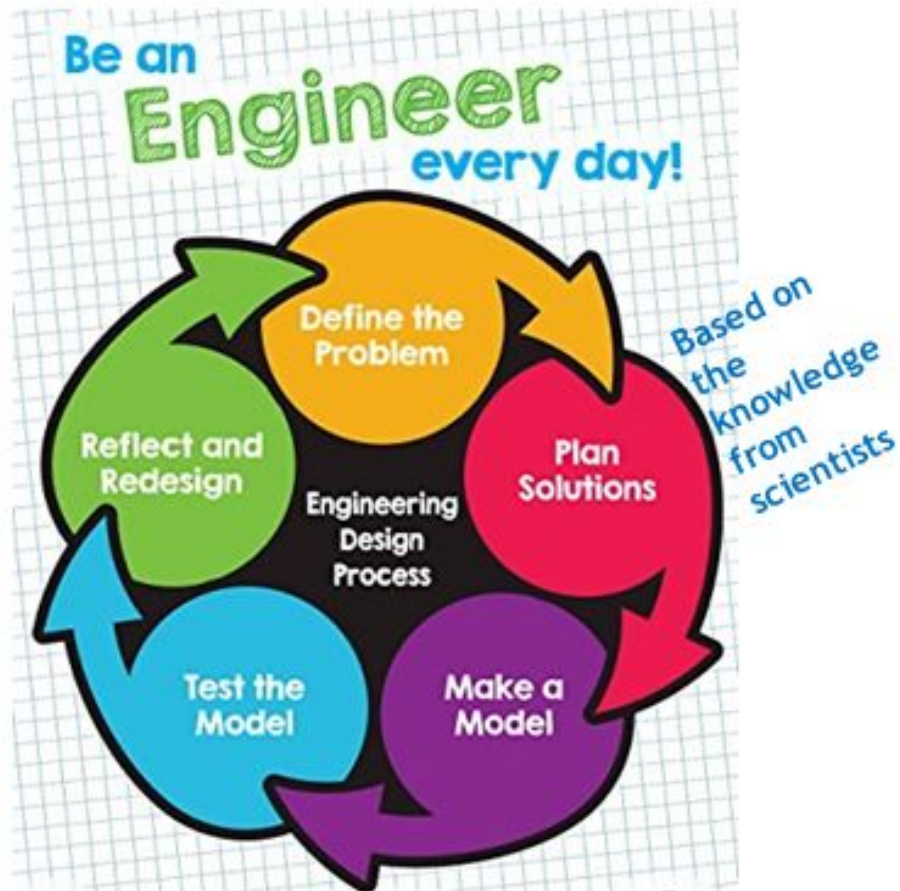


Engineers are Designers/Inventors!

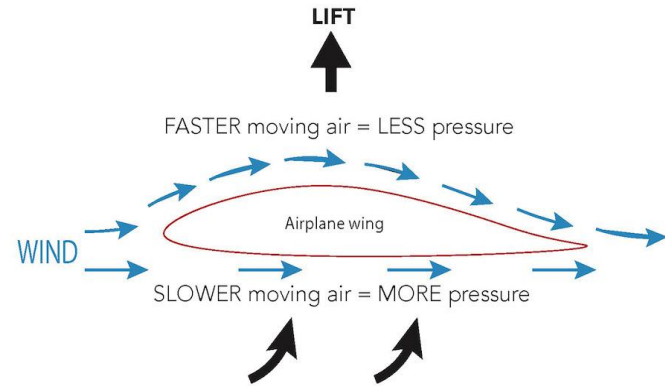
- Scientists study how mother nature behaves.
- They find mathematical models
- Engineers “fool” mother nature through devices to improve our lives.



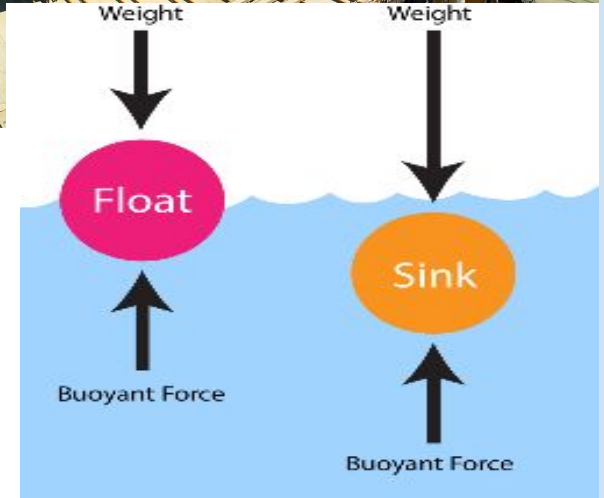
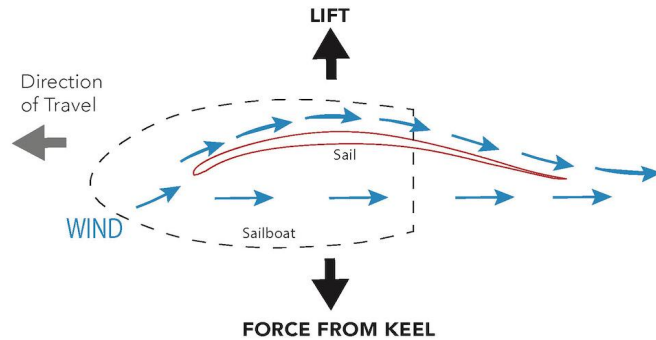
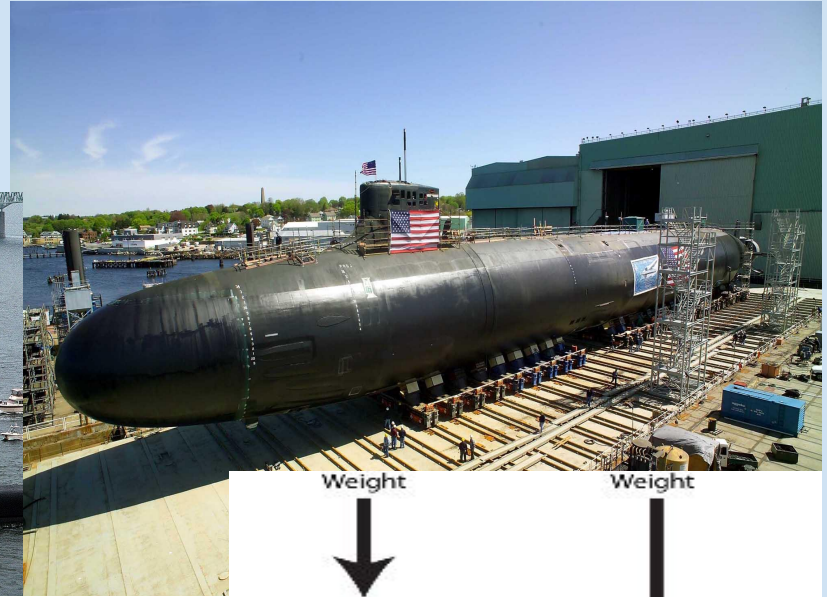
ENGINEERING DESIGN PROCESS



Military Jets



Sailing/ Submarines



Flooding/Sea Level Rise



Cooking



Viscosity

Viscosity is a measure of a fluid's resistance to flow.



Water
Lower Viscosity
1.0 centipoise



Honey
Higher Viscosity
12,200.0 centipoise

Pools/Water Parks



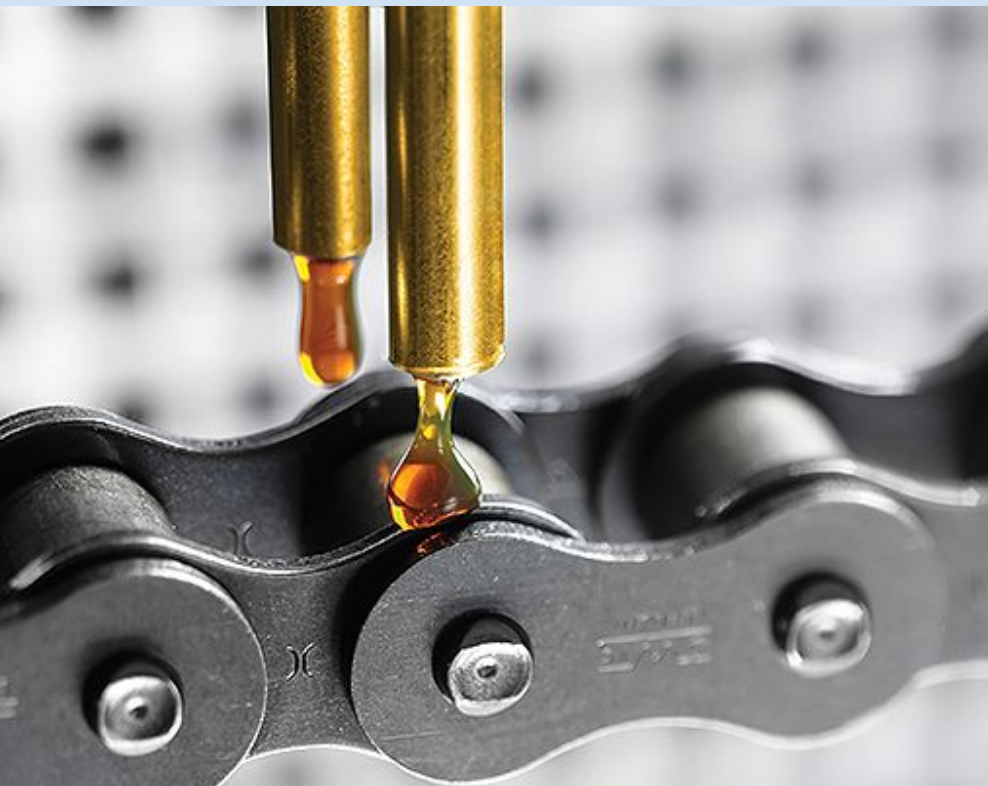
Elevators



Forklifts



Lubricants/Oil for Machines



Wind Turbines



Hoover Dam (dams)



Hot Air Balloons



Now...we want to know more about your interests so we can design an awesome Engineering Lesson for April 21st!

[Hand out printed survey form now! Dr. Gutierrez will have copies.]

On the survey form you will answer:

- If your friend asked you, “What do engineers do?,” what would you say?
- What steps can you remember from the Engineering Design Process (EDP)? Can you put them in order?
- Why is the Engineering Design Process important in engineering?
- Pick the **TOP 3** topics that are most interesting to you!
- Write a short paragraph (4-5 sentences) about why these three topics interest you most!



**Thank you for your
participation today!**

**We look forward to seeing
you all again on April 21st!**