



TeachEngineering

Get Engineering Journey



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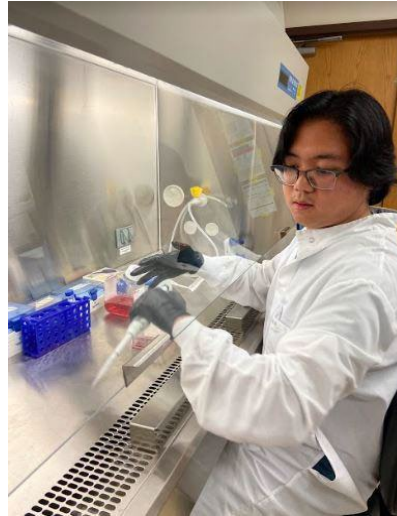
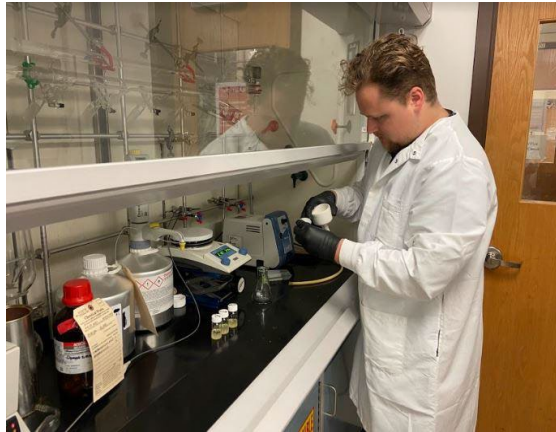


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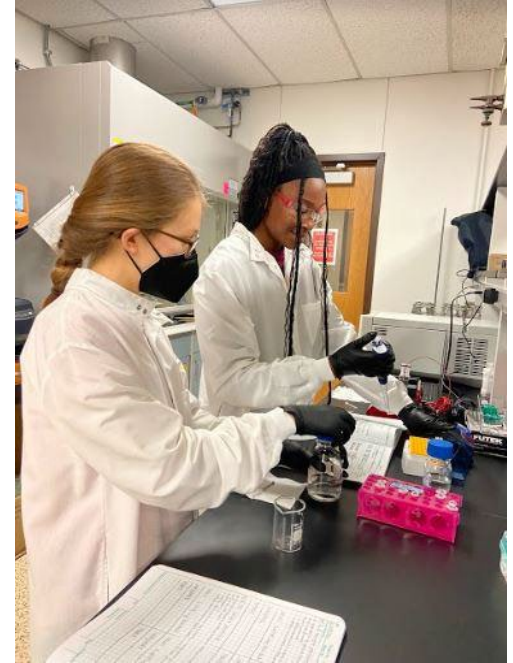
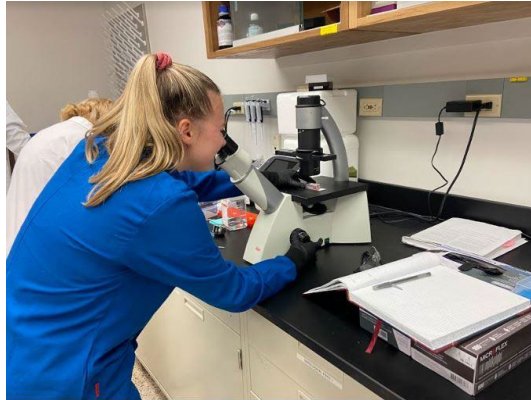
What is Engineering?

Engineers design and improve bridges, roads, vehicles, computers; they design and improve food products, materials, medical devices...anything that is needed to make the world a better place.

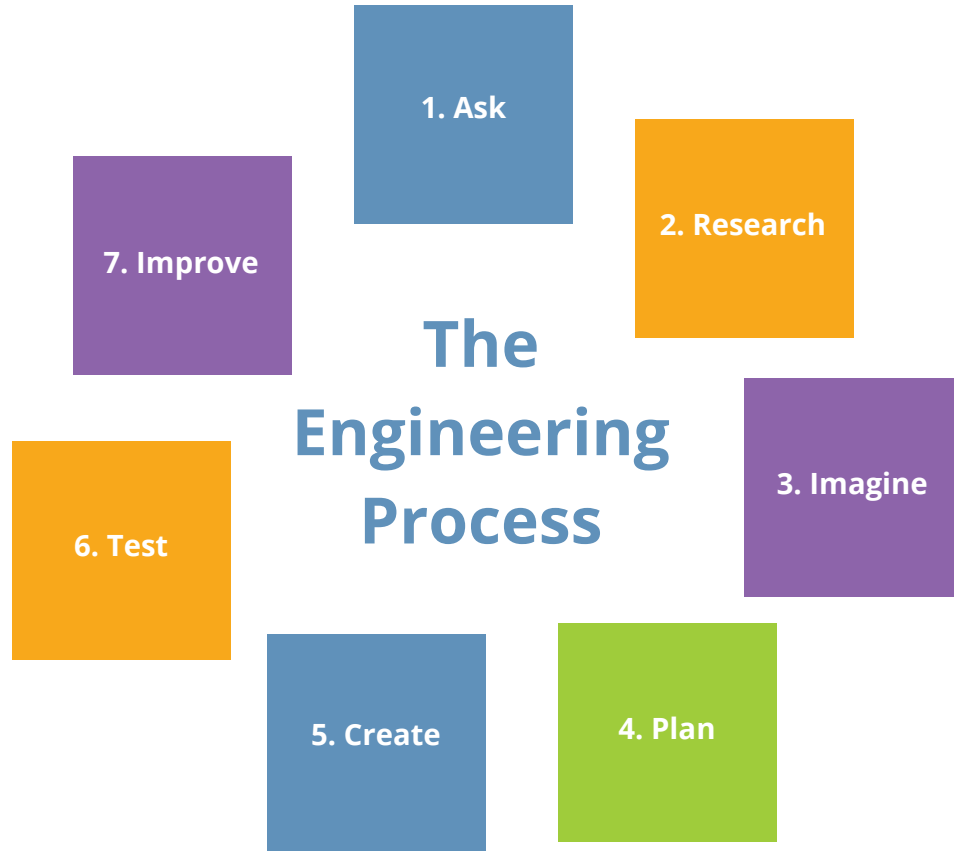


Who Becomes an Engineer?

Anyone who likes to solve problems and explore! These are chemical engineering graduate students at UT Austin. They are designing and testing gels for biomedical research.



How Does Engineering Happen?



Ask

What physical properties do these gels have in common?

-
-
-
-
-
-
-

Ask

Are these gels mixtures or solutions?

-

Why do you think so?

-

Do these gels fit the criteria for one of the three states of matter?

-

Why or why not?

-

What is your definition of a gel?

-

Research

What are gels used for in real life?

1.

2.

3.

4.

5.

Imagine

What else could a gel possibly be made to do?

- **Brainstorm your answers here, and remember: any idea is welcome, no matter how wild!**

Plan for Gel #1

Gel color:

-

Physical property for gel to exhibit:

-

Materials needed:

-

Design procedure:

-

Plan for Gel #2

Gel color:

-

Physical property for gel to exhibit:

-

Materials needed:

-

Design procedure:

-

Plan for Gel #3

Gel color:

-

Physical property for gel to exhibit:

-

Materials needed:

-

Design procedure:

-

Create Gel #1

Observations of the process

I observed...



Create Gel #1

Observations of the process

I observed...



Create Gel #2

Observations of the process

I observed...



Create Gel #2

Observations of the process

I observed...



Test Gel #1

Observations of the test results

I observed...

I think we achieved that result because...

Test Gel #2

Observations of the test results

I observed...

I think we achieved that result because...

Test Gel #3

Observations of the test results

I observed...

I think we achieved that result because...

Improve Part 1

Which gel has the most potential for a real-life application? Why?

-

Improve Part 2

How can we improve this gel to make it able to fulfill a real-life application?

-