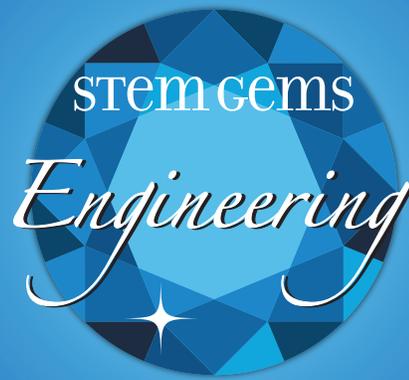


STEM Gem Career:
ELECTRICAL ENGINEER

STEM Gem:
CAROL ESPY-WILSON

“Don’t let fear keep you from doing anything. Face your fears.”



Is a career in Electrical Engineering in your future? STEM Gem Carol Espy-Wilson is crafting 3D models of the human vocal tract to better understand the relationship between the characteristics of physical speech signals and the corresponding position of speech articulators. Now we can talk to Siri as if we are talking to a friend. Read her story and digest. Watch one of her videos. Then, with your STEM Gems Tribe, **discuss, explore, reflect,** and **act.**

DISCUSS

1. How do Electrical Engineers like Professor Espy-Wilson make a difference in the world?
2. What experiences did Professor Espy-Wilson have that led to her pursuit of a career as an Electrical Engineer?
3. What is Professor Espy-Wilson’s educational background?
4. What are some of the challenges that Professor Espy-Wilson faced along her journey?
5. What are some of Professor Espy-Wilson’s key accomplishments?
6. What inspired you most about Professor Espy-Wilson’s story?
7. Professor Espy-Wilson says: *“Don’t let fear keep you from doing anything. Face your fears.”* How does her advice resonate you?

EXPLORE

1. To pursue a career as an Electrical Engineer, what college majors should you consider? What colleges and universities have programs in these areas?
2. What companies hire Electrical Engineers? What is the salary range for an Electrical Engineer?
3. What classes should you take in middle and high school to prepare for college and a career as an Electrical Engineer?
4. Name at least two other women Electrical Engineers. How are they similar to Professor Espy-Wilson? How are they different?
5. What professional organizations support women in Electrical Engineering? Do they have programs available for middle and high school students?

REFLECT

Professor Breazeal says that if you want to do robotics, you can't shy away from traditional math and science courses. She serves as a judge in the FIRST Robotics Competition and believes programs like this one are hugely beneficial. What math and science enrichment programs do you participate in regularly?

ACT

It's time to step outside your comfort zone. Name one concrete thing you will do before your next meeting that will have you one step closer to becoming a STEM Gem. Blog about it. Include it in your written or photo journal. Hold yourself accountable.

Work hard. Be brave. Stay curious.

BE A GEM!

Stephanie Espy

P.S. I'd love to hear about your journey. Share on Facebook, Twitter, or Instagram and tag @STEMGemsBook #STEMGemsTribe, or email me at tribe@STEMGemsBook.com.