



Eric Nied

B.S. in Engineering Physics, Case Western Reserve University (2012)

M.S. in Aerospace Engineering (2022)

Hubbell Power Systems, Wadsworth, Ohio

Describe your overall duties/responsibilities as a Sr. Laboratory Engineer:

The laboratories at Hubbell Power Systems perform high-voltage testing of our company's and customer's power and utility products, such as insulators and flashback arresters. I seek to be the subject matter expert in both the design of our experiments and the underlying physics observed during product testing in extremely high-voltage environments.

Explain the skills/abilities that are required for being successful in your role:

I need to have a solid grasp on proper laboratory techniques. That means safety first; and it also means understanding the purpose of taking a measurement, how to take a measurement, and how to estimate uncertainty of a measurement. I also need to understand the fundamentals of electrical engineering. I need to apply Ohm's and Kirchoff's Laws, understand the physics of things like transformers and diodes, and know how resistors, capacitors, and inductors will affect AC and impulse electromagnetic fields.

What advice would you give to students who are considering majoring in Aerospace Engineering?

Mike Rowe from the TV show "Dirty Jobs" once gave new graduates his advice: 'Don't follow your passion; instead follow opportunities and bring your passion with you.' I recommend considering this advice. Personally, I work hard to create for myself as many opportunities as I can, then pick the best one. Throughout my career - by taking a good opportunity and keeping an open mind - I have had amazing experiences including building a piece of a dark matter detector, implementing IoT to modernize automobile manufacturing, witnessing a universe of chemical reactions inside of a jet engine, and probing the effects of 100kA of electric current flowing through a semiconductor.

