

Global Professional Engineering Profile:

Noah J Dwiel, Purdue Mechanical Engineering BSME

Introduction:

Throughout my four years in High School, I was constantly being peppered by the ever present question “What do you want to study in College, and where do you want to do it?” I always found this to be an extremely tough question to answer, and never was able to formulate a clear idea of my plans in life. When I decided to attend Purdue University for engineering, it was mainly because I had excelled in Mathematics and the Sciences throughout High School. Purdue was my top choice for engineering due to the proximity to home, and the quality of education available for the low in-state tuition. Even during my freshman year here at Purdue, the question changed, but only slightly. It was “What kind of Engineering do you want to specialize in?” Again I found myself slightly confused by the thought that I had to choose a focused career to spend the rest of my life pursuing. So, I chose Mechanical Engineering, so that I could have a large background in many different areas, and be a versatile engineer that excels at learning new, detailed subjects on the job as needed.

Credentials and Experience:

Here at Purdue University, I am majoring in Mechanical Engineering, while pursuing a double minor in Economics and Mathematics. I am currently planning on focusing on statics and dynamics within Mechanical Engineering. Throughout my High School days, I operated my own business mowing lawns for countless neighbors. This may not seem much like Mechanical Engineering, and that is because it really isn't. It did however provide me with invaluable experience in not only face to face customer care, but time management skills, and marketing. Every spring I distributed over a thousand flyers to the surrounding neighborhoods, and had to negotiate payment with each client based on an assessment of their lawn and the type of care they desired. Unfortunately, grass does not wait until summer to begin growing, nor does it stop when the fall semester starts up, so I was required to mow ten to fifteen lawns a week on top of schoolwork and play on the High School Tennis Team. This meant that I had to be extremely efficient with my time, so as to maintain good grades in school while committing so many hours to other tasks. Following my freshman year in College, I worked for a garden center as a full time employee. Again, no direct relevance to Mechanical Engineering, but was able to pick up plenty of important skills during my time there. In the beginning of the summer I did a lot of work at client's houses, doing landscape work. This was hard physical labor, but I thoroughly enjoyed doing it. I love to work with my hands, whether it is landscaping, general repair work around the house, or basic automotive work. By the end of the summer, there was no demand for landscaping, so I was shifted to more general work around the garden center.

My work at the garden center was an interesting mix of physical labor and general retail work. One of the most enjoyable tasks was loading mulch and compost into customer's trucks, using a big tractor. One of the most interesting was learning all of the plant names, types, and growth patterns. Doing all of these different tasks helped me learn how to learn on the job. I quickly picked up on how to operate the tractor, and became the primary operator during my short tenure there. I am now able to appreciate the idea that you not only need to learn while in College, to be successful, one needs to be able to constantly be learning new specialized subject to keep ahead of the rest of the field.

Professional Interests:

During my career as a Mechanical Engineer, I hope to be able to contribute my skills to help solve the energy crisis. I love the environment, and would love to be able to continue working in areas related to protecting and preserving it. I am always hearing about the success of start-up companies, and while I understand that they are currently being romanticized to a large degree, I would still love to have the opportunity to own my own company, hopefully as a global, eco-friendly company focusing on living in harmony with the environment without giving up any part of our lifestyle. In the coming years, alternative fuel sources and propulsion systems will become a major part of mechanical engineering, and I would love to be working at the forefront of that field. Alternative fuels will be crucial due to the frightening increases being seen in CO₂ emissions and this trend will not reverse itself without major R&D work in alternative fuels. This increase in CO₂ emissions is unsettling because of the observable environmental effects global warming is already having on our planet. Storms are becoming more violent and more wide-reaching in their destruction. These are major problems that need to be addressed as soon as possible by as many as possible, or society will soon be facing much more dire consequences to our exploits of the planet. This is one of the more specific areas I could enjoy devoting my career to. As seen by the minor in Economics, I am very interested in the relationship between supply and demand, and how companies must adapt in order to succeed in the free market system. I think this knowledge will be crucial if I plan on being any type of upper management, let alone owner of my own business. More and more people are starting their own companies these days, so in order to be successful, I will need to have a solid understanding of not only my product or service, but the marketing of said product or service, customer care, and the economy in which I am operating in.

Noah Dwiel

31 Hilltop Dr, apt 6
West Lafayette, IN 47906-2575

ndwiel@purdue.edu