

The logo for SWE NEXT, with 'SWE' in blue and 'NEXT' in light blue and yellow.

SWEet Wisdom Spotlight - Abena Kwakyi

In February's newsletter we met Abena Kwakyi, a Manufacturing Engineer who works for The Port Authority of New York and New Jersey.

We asked Abena to tell us about her education and career. We couldn't use her whole story in the newsletter, but it was filled with words of wisdom, so we decided to have a special edition of SWEet Wisdom with Abena's advice. Enjoy!



“It's okay to change your mind, as long as you stay true to yourself and stay the course! It may be challenging at times, but do not give up.”

Growing up in Ghana, I had always wanted to be an astronaut and explore the universe. I watched liftoffs, loved everything about the solar system and read a lot. I also loved solving problems and designing. Thus, throughout high school I knew I wanted to study engineering but wasn't sure which field to pursue.

Even though I registered 'undecided' within Engineering at Boston University (BU), I still had my mind set on being an astronaut, partly because everyone had come to expect me to put Ghana's flag on the moon. I signed up for a number of Aerospace Engineering electives yet one introductory class on design and manufacturing caught my attention. It offered me a chance to combine design and problem solving to create a product that addressed a need. With the advice and guidance from my faculty advisor and other professors about my dreams and passions, I ended up pursuing a Bachelor of Science degree in Manufacturing Engineering and graduated in 2011.

It wasn't easy. I passed most classes, I underperformed in some, and others I retook. I learned how to prioritize and better balance my class load with work study hours. I also learned to get as much help as I needed from classmates, professors and tutoring services on campus. It's important to seek the help that you need to succeed. Through

the classes and projects, I discovered so much about how I work best individually and how to communicate and work successfully in a team.

“Always be open to interact with, learn from and teach others, especially when they seem different. In that space you will find some common ground.”

One of my favorite projects was working with the Electrical Maintenance staff to increase efficiency during their daily tours. I interviewed management and maintenance supervisory staff regarding areas for improvement. I accompanied the electricians and learned of all the work they do and their operations. I observed all of their shifts at each facility. Through this study we were able to make changes and implement best practices to increase ease and efficiency during their tasks. It was a little daunting during each first meeting with the electrical staff and supervisors as I was the only female engineer and woman of color in the room. However, after explaining the purpose of the project, they were on board and taught me much more than I had expected.

Throughout my academic and professional career, I have not only been encouraged by family and friends, but also classmates, fellow students, professors and mentors that have been very different from me. In turn, I have also been there to support and encourage them which has helped build lifelong relationships.

“Find ways to make the time to do what you love.”

Balance is important. Throughout my time at BU, I was involved in various activities to give me needed balance. I was a member of the Inner Strength Gospel Choir and the African Student Organization and its dance troupe. I worked with the Howard Thurman Center for Common Ground. I served as a Dean's Host and Student Advisor in the College of Engineering. I was also a geometry tutor at a public high school, and I co-lead an after school mentoring program for a semester.

Now, at least once a month, I attend a soca and afro-beat workout dance class because I love to dance!

“Never stop learning. The experiences and skills can always be transferred and are never a waste!”

I pursued a Green Belt Six Sigma certification course through Villanova University because I knew I wanted to go back to school for my masters. This not only helped during graduate school, but also in my application to get an internship with my current employer.

In 2013, I moved to New Jersey and attended Stevens Institute of Technology to pursue a Masters of Engineering in Integrated Product Development. In addition to

engineering classes, I had to take non-engineering classes I liked, relating to project management, and those I was not too keen of, such as finance-related engineering economics. I ended up adding an Engineering Management Certificate to my graduate degree because of the value I gained from those courses. These helped make me a well-rounded professional and have helped me in my career as an engineer in a finance team.

“Join professional societies for community, support, networking and professional development opportunities.”

This past August, I pursued a universally recognized certification as an Airport Certified Employee in Operations through the Association of American Airport Executives (AAAE). A number of colleagues were already members of AAAE and encouraged me to join and pursue their certifications and professional development. I’m already signed up for the Security certification course in April this year to open myself up to other opportunities as I gain in-depth knowledge about the aviation industry.

During my undergraduate and graduate degrees, I was a member of the National Society of Black Engineers (NSBE) and served on the New England Zone Board while at BU during my senior year. I was a member of the Society of Women Engineers (SWE). Definitely take advantage of these professional societies throughout your academic and professional careers! The benefits include free or discounted access to learning materials, scholarships for school or conferences, career resources and more!

Wishing you all the best in school and your future! We’re rooting for you! **Be Bold, Be Humble, Be Yourself.** And never forget “Knowledge Is Power for Service” (*Motto from my elementary/middle school Morning Star School in Ghana*).



130 East Randolph Street, Suite 3500
Chicago, IL 60601

www.swe.org | #BeThatEngineer