



# INTERESTED IN STEAM?

By: Catreen Abouelsaad

2016 High School Summer Intern  
NYC Department of Design and Construction

Progressing through high school you start to take interest in certain subjects over others. For me, I started becoming more interested in fields involving math and science. If you see yourself following a similar path, you should consider looking into STEAM (Science, Technology, Engineering, Architecture, and Math) careers. Over the summer, I was able to gain additional insight into the STEAM fields while attending the High School Summer Internship Program at the New York City Department of Design and Construction (DDC). Located in Long Island City, DDC is the City's primary capital construction project manager. The agency builds many of the civic facilities New Yorkers use every day; such as firehouses, libraries, museums, police precincts, courthouses, senior centers and more. DDC also designs, builds and improves vital city infrastructure like roadways, sewers and water mains in all five boroughs.

During this six week, PAID internship, I had the chance to learn from experienced architects, engineers, and other built environment professionals. Not only do interns have the opportunity to interact with the people who actually help build and maintain the city we live in, but we were also able to gain hands-on experience and learn about the different software programs used by construction industry professionals, like AutoCAD or Revit. One of the 3 D software programs we learned to use was Google Sketch-Up. We used Sketch-Up to compose intricate designs of futuristic public buildings



Interns' Sketch-Up designs printed on Makerbot 3D printers.

and we designed and printed out models of our structures using MakerBot 3D printers.

Through the internship you can also learn to use computer programs such as Excel and AutoCAD, and if you are already familiar with these programs you can improve your abilities with the support and guidance of your supervisors. Not only do you get to participate in the world of architecture, engineering and construction, but you also learn how to budget the money you receive from the internship, how to work toward the creation of an eco-friendly city, and you even get to become OSHA-certified! OSHA stands for Occupational Safety and Health Administration. The purpose of OSHA is to ensure safe working conditions on construction sites.

I cannot stress enough how beneficial this internship was for me and my fellow interns. We have bonded with our supervisors and gained advice and guidance that will remain with us for the rest of our lives.

We were also able to interact with college interns from all over the country and get advice on how to approach the college and interview process. I have spoken to several of the college interns and am attempting to guide my future career based on their sound advice. Instead of pushing rigorously for a planned future, I have learned to embrace learning and the gaining of additional experience while in the moment. From the college interns, I learned that college is an opportunity to not only gain experience, but also to learn. It is not simply another stepping stone on the path to a career. Instead of dreading the college process, I am beginning to enjoy the idea of going off to college.

I enjoyed every single minute of my summer internship. We had the opportunity to visit DDC construction sites, such as the second Public Safety Answering Center (PSAC II), a back-up of the city's 911 call center; a Safe Route to Schools infrastructure project focused on safety improvements at city schools with the highest accident rates, and the Bronx River House, an initiative to cleanse the Bronx River. We also got to visit Staten Island and observe projects that serve to develop and construct storm water Best Management Practices, which collect run off that would otherwise flood homes, streets and parks. In addition, we also shared many laughs while playing charades and we even managed to commandeer



High School interns visit the Public Safety Answering center II (PSAC II) in the Bronx.

two or three tables during lunch time to get to know each other better. I could not think of a better way to spend my summer. The knowledge, connections and the friendships I have gained will benefit me greatly into the future.

If you are interested in the STEAM fields, I encourage you to apply to DDC's High School Summer Internship Program through DYCD's Ladder's for Leaders, Summer Youth Employment Program. While it takes hard work and dedication, the DDC Summer Internship Program is both insightful and enjoyable.



The 2016 class of DDC High School and College Interns