Cybersecurity Industry Summit 2023: Shaping the Future of Cybersecurity Education and Career Pathways in South Bronx

On June 8, 2023, Hostos Community College held a Cybersecurity Summit. The summit, sponsored by Hostos President Daisy Cocco De Filippis, Community Advisory Council (CAC) Chair Elias Alcantara, Academic Affairs, and Continuing Education and Workforce Development, served as a platform to discuss the skills, education, and future outlook in the rapidly growing field of cybersecurity.

President Cocco De Filippis and CAC Chair Elías Alcántara

Mr. Alcantara served as the master of ceremonies at the event. The Summit's Keynote Speaker was industry leader Elizabeth Sampson, Head of Enterprise Technology and Cybersecurity at Macquarie Asset Management, who likened cyberattacks to a new cold war and stressed that any institution and individual is vulnerable. The Associate Dean of Academic Affairs, Andrea Fabrizio, the Chairperson of the Math and Computer Sciences Department, Nieves Angulo, and faculty members (Professor Moise Koffi and Professor Amy Ramson from the Behavioral and Social Sciences Department) presented the curriculum for the upcoming Cybersecurity program. The VP of Continuing Education and Workforce Development, Evelyn Fernandez-Ketcham, talked about CEWD's certificate programs in the technology sector and how they dovetail with the matriculated programs at HCC. Five members of the Federal Bureau of Investigation's Covert Operations Division shared their insights about the critical importance of cybersecurity and stressed that "Cybersecurity is national security."

Hostos Director of Career Services, Lisanette Rosario, interviewed Jouly Lajara, Senior Associate at Price Waterhouse Cooper's Strategy, Risk, and Compliance National Consulting Practice, about how to navigate Cybersecurity career pathways in the private sector. The Dean of Academic Affairs, Babette Audant, facilitated a panel discussion to engage faculty and students in in-depth conversations with partners from public and private sectors on various topics, including student advisement, career pathways, internship opportunities, and curriculum. The key points from each table discussion are:

Dean Fabrizio and faculty from Math & Computer Sciences and Behavioral & Social Sciences Department

- **Admitting and Advising Cybersecurity Majors**: The discussion focused on marketing strategies for the program, outreach to high schools, and the importance of faculty and students in promoting the program. The importance of real-world experiences, internships, and mentorship was also discussed. Python was identified as a key programming language for students.
- **Strengthening Employer Partnerships**: The conversation highlighted the need for alignment between curriculum and industry needs, the importance of continuous learning, and the significance of Python. The top technical skills identified were foundations of programming and networking, understanding of operating systems, and knowledge of emerging technologies like Cloud and Artificial Intelligence (AI).
- **Career Pathways**: The discussion emphasized the need to make career pathways clear for students, the importance of diversity in the Cybersecurity field, and the need to inform students about their online vulnerability. The importance of creativity and flexibility was also highlighted.
- **Industry Standards**: The discussion focused on the current industry requirements for different roles in the FBI, the importance of multilingual skills, and the various programs and internships offered by the FBI. The application process for special agents was also discussed.
- **Curriculum & Articulations**: The conversation centered on the alignment of the curriculum with industry needs. Recommendations included the inclusion of communication and business communication skills, technical writing, and fundamental operating systems. The importance of certifications and building a portfolio was also discussed. The potential for internships and corporate partnerships was also highlighted.

Keynote Speaker Elizabeth Sampson

HCC will review the recommendations and discuss the process to improve program development and student support services.