**DATE**: November 21, 2023

**TO**: Anne Marie Sowder, Chair of the College Curriculum Committee

**FROM**: Curriculum Subcommittee

Sanjoy Chakraborty (Chair), Brittany Richards, Ryoya Terao, Zheng Zhu

**RE**: Final Report for Proposal 24-01: BS in Cybersecurity

**PROPOSAL OVERVIEW:**

The Department of Computer Systems Technology (CST) at the School of Technology (NYCCT/Citytech) proposes a BS degree in Cybersecurity. The program is designed to foster in students the knowledge and skills required to defend computer systems, networks, information, and data from cyberattacks. The proposed curriculum includes selected core and general education courses, foundational computer system topics, and specialized cybersecurity courses. This proposal also includes five new CST courses and a list of major electives provided by the Department of Mathematics and CST.

**RATIONALE:**

The proposed Cybersecurity program at NYCCT, offered through the CST department, is designed to meet the growing demand for cybersecurity professionals, as evidenced by recent studies highlighting a significant need for specialists in this field. Currently, within the CUNY campuses, only Queensborough Community College and Bronx Community College offer AAS degrees in cybersecurity. Moreover, only the City College of New York and John Jay College of Criminal Justice provide master’s degrees in related areas. The introduction of a BS degree in Cybersecurity at NYCCT will fill a crucial gap in the CUNY educational offerings, positioning students for successful careers in this high-demand field or for advanced studies at the master’s level.

**STRENGTHS:**

* Aligns with General Education requirements
* Offers a flexible structure in the early semesters that allows easy transition from the first year courses to the BTech in CST and BS n Data Science programs without losing credits for completed courses, safeguarding students’ academic progress.
* Enhances chances of admission into graduate programs, including opportunities at two CUNY campuses.
* Focuses on developing both the theoretical knowledge and robust skills in computer systems and network security fostering students with the expertise needed to prevent cyberattacks effectively.
* Broadens career opportunities in the high-demand field of cybersecurity.

**WEAKNESS:**

None noted.

**ISSUES AND CONCERNS DISCUSSED:**

During the review by the subcommittee and the meeting with the Provost’s office, several adjustments were proposed. These recommendations primarily concerned altering the section of the proposal about job prospects, the terminology for outlining learning outcomes, the detailed semester-wise plan, policies on attendance, the articulation of drafting, and the estimation of costs. Each of the five new courses underwent a detailed review to identify any small alterations needed, ensure accurate course descriptions in academic reports, verify signatures, and confirm all necessary documentation. The proposers carefully responded to every comment, making the recommended changes and offering clarifications where needed.

**SUBCOMMITTEE ACTIVITIES:**

The proposal for the BS in Cybersecurity was assigned to the subcommittee on September 18, 2023. The proposal also included examining five new courses and one prerequisite change. The subcommittee convened on October 5 and October 11, 2023, to consolidate their feedback and recommendations, which were subsequently sent to the proposers on October 21, 2023. The first revised proposal was received on October 30, 2023. The subcommittee met with Provost Pamela Brown, Associate Provost Reginald Blake, Kim Cardascia (Provost’s Office), Dean Gerarda M. Shields, and Professors Ashwin Satyanarayana, Janusz Kusyk, and Cyrus Meherji to discuss the revisions on November 9, 2023. The subcommittee received the second revised version on November 16, 2023, and the final version, with minor modifications, on November 19, 2023.