**Final Report**

**New Course Proposal 19-14**

**CST 2412 – Data Security, Privacy and Ethics**

**DATE: November 4, 2020**

**TO: Phillip Anzalone, Chair**

**College Council Curriculum Committee**

**FROM: Curriculum Subcommittee**

**Dionne Bennett (Chair), Khalid Lachheb, Zheng Zhu**

**RE: Final Report for New Course Proposal 19-14**

**CST 2412 – Data Security, Privacy and Ethics**

**COURSE TITLE AND NUMBER: CST 2412 – Data Security, Privacy and Ethics**

**CREDIT HOURS: 3 credits; 2 lecture hours and 2 lab hours**

**PREREQUISITES: CST 2402**

**Catalog Description:**

This course is an introduction to security issues that computer professionals and data scientists face today. Course topics focus on the privacy, legal, ethical and social concerns that arise with the processing and management of big data. These topics include data security, protection against data corruption, and the role security management plays in cybersecurity and data security defense. The course prepares students to interpret privacy policies, protect data privacy, and manage data ethically.

**Rationale (From Proposal)**

CST 2412-Data Security, Privacy and Ethics is the first security course for students in the Bachelor of Science in Data Science at City Tech. It is necessary and important for Data Science students to acquire the knowledge and skills to maintain the coherence, authenticity, and availability of data. This course equips students and computing professionals with the basic information and data security knowledge and teaches them how to utilize data analytics to implement and maintain modern information infrastructure and systems. The course will replace CST 2410 (Introduction to Security) in the Bachelor of Science in Data Science program.

**Strengths:**

The subcommittee strongly supports this course and believes it will meaningfully benefit students and the institution as a whole. As addressed in the proposal, CST 2412 is the first comprehensive security course in the data science program at City Tech. The course has been thoughtfully considered and developed by the proposer who demonstrated a strong commitment to the course, its subject, and the students who will learn from it. CST 2412 is a timely and valuable course that provides an essential pedagogical and professional resource for students who are pursuing careers in data science. Although it is not an “ID” course at this time, it engages interdisciplinary perspectives and addresses issues that affect individuals, institutions, and entire countries. The course provides knowledge, skills, and resources that will enable students to understand everything from the nuanced personal dynamics of data security in consumer and media interactions to global dynamics that are related to the preservation of civic life on an international scale.

The knowledge provided in the course will help City Tech students stand out and excel in a competitive and complex professional environment. In addition to receiving a strong and applicable foundation, students will complete the certificate in Information Security Basics. As discussed in the meeting with the provost’s office, the course has the potential to offer exciting opportunities for student research and interdisciplinary engagement not only within the School of Tech and Design but, also, with disciplines in other schools in the college. For example, productive interdisciplinary connections can be made with disciplines related to philosophy, political science, sociology, and media. These could occur in the form of classroom interactions, professional engagement, and conferences and symposia to name a few.

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**(Strengths Continued)**

The course’s engagement with social and ethical dynamics in relationship to data security is another strength that indicates that the proposer and the department, in addition to supporting students in their educational and professional goals, are, also, attending to critical issues of moral leadership and professional integrity for City Tech Students and the growing Data Science industry. This is a significant benefit that cannot be overstated. It could have consequences for the professional lives of our students, for the lives of those whom their work impacts, and relates directly to the industry and society as a whole. This focus will benefit the intellectual and professional reputation of our students, of the Computer Systems Technology Department, and of City Tech as an institution. In addition to providing tremendous intellectual, professional, and even personal benefits to individual students, due to its timely focus on data privacy and security and their relationship to ethics, the course fulfils the institutional goals of City Tech to provide a relevant and meaningful education that dynamically engages current academic, professional, and social discourses.

**Weaknesses**

None

**Issues and Concerns Discussed**

The subcommittee discussed topics with proposer related to contextualizing and clarifying the course through further development of the description and rationale, elaborating on the social and ethical perspectives and dynamics of the course and its subject matter, addressing the professional benefits of the course to students, responding to questions regarding the course readings, providing additional information regarding assignments and additional information for students. In the meeting with the Provosts Office, Dean, and Chair, the proposer responded to questions regarding the changes to the degree. Dr. Chen addressed all questions and concerns and made appropriate revisions.

**Subcommittee Activities**

The subcommittee met with the proposer, Dr. Yu-Wen Chen, at the end of the Spring of 2020 semester via zoom to the discuss the proposal and to offer notes on how to improve it. The proposer and the subcommittee continued to communicate via e-mail and the proposer, made additional revisions requested by the subcommittee during the Fall 2020 semester. Dr. Chen met with the subcommittee again prior to meeting on October 22nd, 2020 with Provost Brown, Associate Provost Blake, Dean Shields, Department Chair Satyanarayana, and Administrative Executive Officer Cardascia. Dr. Chen made additional revisions to address questions that had been introduced during this meeting. The subcommittee is satisfied that concerns have been addressed and, again, strongly supports the proposal.