Student Learning Outcomes for Academic Programs

A.S. in Computer Science and Information Security – Dual/Joint with B.S. at John Jay College of Criminal Justice Catalog Year 2017-18

General Education Outcomes

- 1. Communicate effectively through written and oral forms
- 2. Use analytical reasoning to identify issues or problems and evaluate evidence in order to make informed decisions
- 3. Reason quantitatively as required in various fields of interest and in everyday life
- 4. Apply information management and digital technology skills useful for academic research and lifelong learning
- 5. Discipline specific outcomes: A robust general education is founded on the knowledge, concepts, methods and perspectives that students gain through study of the social sciences and history, the natural sciences, the arts and the humanities. These disciplinary studies stimulate intellectual inquiry, global awareness, and cultural and artistic appreciation; they equip students to make informed judgments and engage with life beyond the classroom.
 - a. Apply concepts and perspectives from history or the social sciences to examine the formation of ideas, human behavior, social institutions, or social processes and to make informed judgments
 - b. Apply concepts and methods of the natural and physical sciences to examine natural phenomena and to make informed decisions
 - c. Apply aesthetic and intellectual criteria to examine or create works in the humanities and the arts and to make informed judgments

Program Outcomes

- A. Apply knowledge of computing and mathematics appropriate to the transfer to the junior year in computer science or a related discipline.
- B. Analyze problems, and identify and define the computing requirements appropriate to its solution.
- C. Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- D. Function effectively as a member of a technical team to accomplish a common goal.
- E. Demonstrate an understanding of and a commitment to professional, ethical, legal, security and social issues and responsibilities.
- F. Apply written, oral, and graphical communication in both technical and nontechnical environments; and identify and use appropriate technical literature.
- G. Understand the need for and demonstrate an ability to analyze the local and global impact of computing on individuals, organizations, and society.
- H. Understand the need for and demonstrate an ability to engage in continuing professional development.
- I. Use current techniques, skills, and tools necessary for computing practice.
- J. Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
- K. Apply design and development principles in the construction of software systems of basic complexity.