METROPOLITAN STATE UNIVERSITY OF DENVER

Center for Individualized Learning
Individualized Degree Program (IDP)

Incubator Program in Cybersecurity
Extended Major – BS (no minor required)

Program Description

The new B.S. in Cybersecurity is one of a very few social sciences based B.S majors in Cybersecurity across the nation. The new program aims at providing students with in-depth knowledge and background as well as practical skills in policy-making regarding assessing, managing cyber threats as well as investigating, prosecuting and punishing cyber criminals.

The new program is jointly offered by the Departments of Criminal Justice & Criminology (CJC, CPS), Computer Information System (CIS, CB), and Mathematical and Computer Sciences (CS, CLAS). The Department of Criminal Justice and Criminology will house and administer this tri-college, multi-disciplinary program.

The new B.S. in Cybersecurity provides students with a rare chance to obtain a social-sciences-based B.S. degree in cybersecurity as well as a bright future of employment. Mainly, students will learn:

- Digital techniques and tools such as cyber threat analysis and information sharing, cyber laws/regulations to manage and secure cyberspace, prevent, detect, and recover from cybercrimes;
- Investigative skills and prosecuting knowledge of cybercrimes and criminals, as well as human behaviors such as “fraud indicators” or suspicious behavior;
- Theoretical understanding of cybercrimes and criminal behavior, as well as controlling cybercrimes through prevention and punishment;
- The impact of social media on the criminal justice system, and therefore the significance of cybersecurity, and
- The impact of cybercrimes and criminals and their victims on the criminal justice system.

The new B.S. Cybersecurity couples its unique content as mentioned above with an emphasis on work-readiness skills as well as a flexible course delivery (i.e., in the classroom, online, or hybrid classes).

Faculty Liaison(s) from Key Departments:
Dr. Janos Fustos – Computer Information Systems
Dr. Steve Beatty – Computer Science
Dr. Liying Li – Criminal Justice

RECOMMENDED GENERAL STUDIES COURSEWORK

All students must complete the standard General Studies requirements for their catalog year.

A minimum grade of "C" is required for a course to count toward the major. The B.S. in Cybersecurity program does not allow plus and minus grades.

(The specific courses listed will fulfill prerequisites needed for later coursework):

Written Communication		6
Oral Communication		3
Quantitative Literacy	MTH 1310 – 4	4
Arts and Humanities	PHI 3370 – 3	6
Historical		3
Natural and Physical Sciences		6
Social and Behavioral Sciences I	CJC 1010 – 3	3
Social and Behavioral Sciences II	PSY 1001 – 3	3
Global Diversity	(can be met with a course in another General Studies area)	(3)
	Total General Studies (GS)	**34-37**
Multicultural Requirements		3
	Total GS and Multicultural Requirements	**37 - 40**

Pre-major recommendations: (Total 6 credit hours – these are prerequisites for courses listed below.)
CJC 1010 (Introduction to the Criminal Justice System) – 3
CIS/CSS 1010 (Introduction to Computers) - 3 (Students can waive CIS/CSS 1010 by passing a placement test)

CJC Recommended Courses: (Total 27 credit hours)
CYB 2001 (Cyber Laws and Regulations) – 3 (prefix and course proposed for Fall 2017)
CJC 2500 (Criminal Investigation) – 3 (course proposed for Fall 2017)
CJC 3210 (White-Collar Crime) – 3
CJC 3420 (Organized Crime) – 3
CJC 3800 (Federal Law Enforcement) – 3
CYB 3980 (Internship) – 6 (prefix proposed for Fall 2017)
CYB 4000 (Capstone Seminar [Senior experiences]) – 3 (prefix and course proposed for Fall 2017)
One elective CJC course (Choose from any CJC upper division courses) - 3

CIS Recommended Courses: (Total 18 credit hours)
CIS 2010 (Foundations of Information Systems) - 3
CIS 2110 (Structured Problem Solving in Information Systems) - 3
CIS 3230 (Telecommunication Systems and Networking) - 3
CIS 3500 (Information Systems Security) – 3
CIS 4500 (Information Systems Security Tools and Techniques) - 3
CIS 4550 (Information Systems Security Management and Information Assurance) - 3

CS Recommended Courses: (Total 18 credit hours)
CSS 2751 (Principles of Cybersecurity) - 3
CSS 2752 (Information Assurance) - 3
CSS 2753 (Network Security) - 3
CSS 2754 (Host Security) – 3
CSS 3751 (Application Security) - 3
CSS 3752 (Computer Forensics) – 3

Total recommended credit hours = 63, plus 6 credits of prerequisites.

Note: These recommendations include 39 upper division hours. All students must complete 40 upper division hours as part of the entire degree so 1 additional upper division credit will be needed either in General Studies or as general electives.