Cybersecurity Program
Catalog 2019/2020 – 120 Hours

NOTE: This flow chart is provided as a guide; the catalog is the only definitive source of requirements.

For admission completion of MAD 2104, CGS 1540, COP 2512, and COP 2513 with a minimum GPA of 3.0 (all grades “C” or better, “C-” is not acceptable). No more than two courses in the Department pre-admission.

Mathematics – 10 hours
- STA 2023 (3 hrs) Intro to Statistics
- MAC 1147 (4 hrs) PreCalc Alg/Trig
- MAD 2104 (3 hrs) Discrete Math

Science – 6 hours
- PHY 2020 Conceptual Physics (3 hrs)
- COP 2512 (3 hrs) Programming Fund for IT
- COP 2513 (3 hrs) Obj Oriented Program for IT
- EGN 3000/3000L (3 hrs) Foundations of Engineering
- CGS 1540 (3 hrs) Intro to Databases
- CGS 3303 (3 hrs) IT Concepts

Breadth courses – 6 hours
- PSY 2012 (3 hrs) Intro to Psych Sci (FKL Soc/Beh)
- ECO 2013 (3 hrs) Macroeconomics (FKL Soc/Beh)

Additional requirements
- Gen Ed Humanities (3 hrs)
- Gen Ed Human and Cultural Diversity in GC (3 hrs)
- Gen Ed Information and Data Literacy (3 hrs)
- ENC 3246 Communication for Engineers (3 hrs)
- Foreign Lang (8 hrs or 2 years high school)

Industry internship
An industry internship is recommended for the third summer. Credit can be earned as CIS 4947 Industry Internship for IT (3 hrs – Approved Cybersecurity elective). See Department Advisor for information.

Industry certification
Students will be prepared to immediately earn CompTIA Security+ and CompTIA Network+ certifications. Students will be prepared to get practical experience to earn the CISSP certification.

Approved Cybersecurity electives (15 hrs)
- CIS 4200 (3 hrs) Penetration Testing for IT
- CIS 4622 (3 hrs) Hands-on Cybersecurity
- CIS 4219 (3 hrs) Human Aspects of Cybersecurity
- CEN 3722 (3 hrs) Human Comp Interfaces for IT
- CIS 4219 (3 hrs) Secure Software Development
- ISM 4323 (3 hrs) Information Sec and IT Risk Management
- CIS 4935 (4 hrs) IT Senior Project (Senior standing)
- LIS 4414 (3 hrs) Information Policy and Ethics

English – 6 Hours
- ENC 1101 (3 hrs) Composition I
- ENC 1102 (3 hrs) Composition II

Mac Ed – 6 Hours
- MAD 2104 (3 hrs) Discrete Math
- COP 2512 (3 hrs) Programming Fund for IT
- COP 2513 (3 hrs) Obj Oriented Program for IT
- CIS 3515 (3 hrs) Foundations of Cyber Security
- CIS 3363 (3 hrs) IT Systems Security
- CIS 4219 (3 hrs) Human Aspects of Cybersecurity
- CIS 3615 (3 hrs) Secure Software Development
- ISM 4323 (3 hrs) Information Sec and IT Risk Management
- LIS 4414 (3 hrs) Information Policy and Ethics
- CIS 4935 (4 hrs) IT Senior Project (Senior standing)