Cybersecurity Program
Catalog 2021/2022 – 120 Hours

Mathematics – 10 hours

STA 2023 (3 hrs)
Introductory Statistics 1

MAC 1147 (4 hrs)
PreCalc Alg/Trig

MAD 2104 (3 hrs)
Discrete Math

Science – 6 hours

EGN 3000/3000L
(3 hrs)
Foundations of Engineering

PHY 2020 (3 hrs)
Conceptual Physics

Natural Science Elective (3 hrs)

COP 2513 (3 hrs)
Obj Oriented Program for IT

CIS 3213 (3 hrs)
Foundations of Cybersecurity

COP 2512 (3 hrs)
Programming Fund for IT

CGS 1540 (3 hrs)
Intro to Databases

COP 3515 (3 hrs)
Adv Program Design for IT

CIS 3363 (3 hrs)
IT Systems Security

COP 4538 (3 hrs)
Data Struc and Algorithms for IT

CGS 3303 (3 hrs)
IT Concepts

CNT 4104/4104L
(4 hrs)
Comp Info Networks for IT w/ lab

CNT 4403 (3 hrs)
Network Security and Firewalls

COP 4703 (3 hrs)
Adv Database Systems for IT

CEN 3722 (3 hrs)
Human Comp Interfaces for IT

CGS 3853 (3 hrs)
Web Systems for IT

CIS 4200 (3 hrs)
Penetration Testing for IT

CIS 4622 (3 hrs)
Hands-on Cybersecurity

Approved Cybersecurity electives
(9 hrs)

CIS 4935 (4 hrs)
Senior Project in IT

General Electives (9 hrs)

English – 6 Hours

ENC 1101 (3 hrs)
Composition I

ENC 1102 (3 hrs)
Composition II

Grammar and Composition (3 hrs)

Science – 6 hours

EGN 1101 (3 hrs)
Composition I

EGN 1102 (3 hrs)
Composition II

Breadth courses – 6 hours

PSY 2012 (3 hrs)
Intro to Psychological Sci

ECO 2013 (3 hrs)
Econ Principles Macroeconomics

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 are prepared to earn CompTIA Network+ and Security+ certifications with some additional study needed. Students are prepared to get practical experience to earn CISSP certification.

Notes

1) MAC 1147 may require MAC 1105 College Algebra as a pre-req. Consult with the Department Advisor.

2) Approved Cybersecurity Electives having prerequisites – see the Department website for more information.

3) The maximum number of credit hours for COP 4900 and COP 4947 in any combination is 9 credit hours. No more than 3 hours of CIS 4947 in a single company.

Note: CGS 1540 with a minimum grade of B based on best attempts. This requirement must be met with a maximum of two attempts allowed.

Requires a 3.2 grade average in MAD 2104, STA 2023, PHY 2020, and MAC 1147 for continuation. All grades “C” or better (“C-” is not acceptable). No more than two courses in upper-level pre-continuation.

Required:

This flowchart is provided as a guide; the catalog is the only definitive source of requirements.

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