

# Cybersecurity Program Catalog 2023-24 – 120 Hours

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

See the USF 2023-24 undergraduate catalog for information on progression into the upper level. Progression into the upper level is required in order to take upper level courses.

**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**

PHY 2020 (3 hrs)  
Conceptual Physics

Natural Science Elective (3 hrs)

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

**English – 6 Hours**

ENC 1101 (3 hrs)  
Composition I

ENC 1102 (3 hrs)  
Composition II

COP 2512 (3 hrs)  
Programming Fund for IT

CGS 1540 (3 hrs)  
Intro to Databases

**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.

**Breadth courses – 6 hours**

PSY 2012 (3 hrs)  
Intro to Psychological Sci

ECO 2013 (3 hrs)  
Econ Principles Macroeconomics

COP 2513 (3 hrs)  
Obj Oriented Program for IT

CIS 3213 (3 hrs)  
Foundations of Cybersecurity

CGS 3303 (3 hrs)  
IT Concepts

COP 3515 (3 hrs)  
Adv Program Design for IT

CIS 3363 (3 hrs)  
IT Systems Security

CIS 4219 (3 hrs)  
Human Aspects of Cybersecurity

**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**

- MAC 1147 may require MAC 1105 College Algebra as a pre-req. Consult with the Department Advisor.
- Approved Cybersecurity Electives have varying prereqs – see the Department website for more information.
- The maximum number of credit hours for COP 4900 and CIS 4947 in any combination is 9 credit hours. No more than 3 hours of CIS 4947 in a single company.
- Students may be required to complete both an approved civic literacy course and a passing score on a designated civic literacy assessment before graduation from the USF. Consult the catalog.

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

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

CEN 3722 (3 hrs)  
Human Comp Interfaces for IT

CNT 4403 (3 hrs)  
Network Security and Firewalls

COP 4703 (3 hrs)  
Adv Database Systems for IT

CGS 3853 (3 hrs)  
Web Systems for IT

ISM 4323 (3 hrs)  
Information Sec and IT Risk Management

CIS 4200 (3 hrs)  
Penetration Testing for IT

CIS 4622 (3 hrs)  
Hands-on Cybersecurity

LIS 4414 (3 hrs)  
Information Policy and Ethics

Approved Cybersecurity electives (9 hrs)

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CIS 4935 (4 hrs)  
Senior Project in IT

General Electives (9 hrs)

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