

Program of Study (PoS): Bachelor of Science in Computer Science – Cybersecurity Concentration Track

Bachelors Technical CAE-CD (Total 22 KUs)

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| PoS Courses in KU Alignment | Foundational | | | Technical Core | | | | | Optional | | | | | | | | | | | | | |
| | CSF | CSP | ISC | BSP | BNW | NDF | BCY | OSC | ALG | BCO | CCR | CSE | DVF | IDS | MOT | NWF | NTP | PTT | PRI | ACR | DST | NSA |
| COMP 3332 Cryptography | X | X | | | | X | X | | | | | | | | | | | | | X | | |
| COMP 4323 Network Security | X | | X | | | X | | | | X | | | | X | | X | X | | | | | X |
| COMP 4331 Computer Forensics | | | X | | | | | X | | | | X | X | X | | | | | | | | X |
| COMP 4333 Ethical Hacking & Penetration Testing | | | X | | | X | | | | X | X | X | | X | | | | X | | | | |
| COMP 2313 Introduction to Information Security | X | X | X | | | X | | X | | | | | | X | | | | | | | | X |
| COMP 3331 Information Privacy | | X | X | | | X | | | | | | X | | X | | | | | X | | | |
| COMP 4323 Mobile Security | | | X | | | | | | | | | | | | X | | | | | | | |
| COMP 2314 Introduction to Java | | | | X | | | | | X | | | | | | | | | | | | | |
| COMP 2315 Python Programming Language | | | | X | | | | | X | | | | | | | | | | | | | |
| COMP 3306 Operating Systems | | | | | | | | X | | | | | | | | | | | | | | |
| COMP 4312 Computer Networks | | | | | X | X | | | | | | | | X | | X | X | | | | X | X |
| COMP 2336 Data Structures | | | | | | | | | | | | | | | | | | | | | | |

 Cybersecurity Foundational KUs (3)

 Technical Core KUs (5)

 Optional KUs (14)

Foundational CDE Knowledge Units

[Cybersecurity Foundations \(CSF\)](#)
[Cybersecurity Principles \(CSP\)](#)
[IT Systems Components \(ISC\)](#)

Core Technical CDE Knowledge Units

[Basic Cryptography \(BCY\)](#)
[Basic Networking \(BNW\)](#)
[Basic Scripting and Programming \(BSP\)](#)
[Network Defense \(NDF\)](#)
[Operating Systems Concepts \(OSC\)](#)

Core Non-Technical CDE Knowledge Units

[Cyber Threats \(CTH\)](#)
[Cybersecurity Planning and Management \(CPM\)](#)
[Policy, Legal, Ethics, and Compliance \(PLE\)](#)
[Security Program Management \(SPM\)](#)
[Security Risk Analysis \(SRA\)](#)

Optional Knowledge Units

[Advanced Algorithms \(AAL\)](#)
[Advanced Cryptography \(ACR\)](#)
[Advanced Network Technology and Protocols \(ANT\)](#)
[Algorithms \(ALG\)](#)
[Analog Telecommunications \(ATC\)](#)
[Basic Cyber Operations \(BCO\)](#)
[Cloud Computing \(CCO\)](#)
[Cyber Crime \(CCR\)](#)
[Cybersecurity Ethics \(CSE\)](#)
[Data Administration \(DBA\)](#)
[Data Structures \(DST\)](#)
[Database Management Systems \(DMS\)](#)
[Databases \(DAT\)](#)
[Device Forensics \(DVF\)](#)
[Digital Communications \(DCO\)](#)
[Digital Forensics \(DFS\)](#)
[Embedded Systems \(EBS\)](#)
[Forensic Accounting \(FAC\)](#)
[Formal Methods \(FMD\)](#)

[Fraud Prevention and Management \(FPM\)](#)
[Hardware Reverse Engineering \(HRE\)](#)
[Hardware/Firmware Security \(HFS\)](#)
[Host Forensics \(HOF\)](#)
[IA Architectures \(IAA\)](#)
[IA Compliance \(IAC\)](#)
[IA Standards \(IAS\)](#)
[Independent/Directed Study/Research \(IDR\)](#)
[Industrial Control Systems \(ICS\)](#)
[Introduction to Theory of Computation \(ITC\)](#)
[Intrusion Detection/Prevention Systems \(IDS\)](#)
[Life-Cycle Security \(LCS\)](#)
[Low Level Programming \(LLP\)](#)
[Media Forensics \(MEF\)](#)
[Mobile Technologies \(MOT\)](#)
[Network Forensics \(NWF\)](#)
[Network Security Administration \(NSA\)](#)
[Network Technology and Protocols \(NTP\)](#)
[Operating Systems Administration \(OSA\)](#)

[Operating Systems Hardening \(OSH\)](#)
[Operating Systems Theory \(OST\)](#)
[Penetration Testing \(PTT\)](#)
[Privacy \(PRI\)](#)
[QA/Functional Testing \(QAT\)](#)
[Radio Frequency Principles \(RFP\)](#)
[Secure Programming Practices \(SPP\)](#)
[Software Assurance \(SAS\)](#)
[Software Reverse Engineering \(SRE\)](#)
[Software Security Analysis \(SSA\)](#)
[Supply Chain Security \(SCS\)](#)
[Systems Certification and Accreditation \(SCA\)](#)
[Systems Programming \(SPG\)](#)
[Systems Security Engineering \(SSE\)](#)
[Virtualization Technologies \(VTT\)](#)
[Vulnerability Analysis \(VLA\)](#)
[Web Application Security \(WAS\)](#)
[Wireless Sensor Networks \(WSN\)](#)