Program of Study (PoS): Master of Science in Electrical Engineering – Cybersecurity Concentration Track

Master Technical CAE-CD (Total 22 KUs)

PoS Courses in KU Alignment	Foundational			Technical Core					Optional							Aditional or Graduate Thesis/Dissertation/Equivalent						
	CSF	CSP	ISC	BSP	BNW	NDF	BCY	OSC	AAL	ANT	ATC	BCO	CSE	DCO	FPM	ICS	IDS	MOT	NSA	NTP	OST	PTT
ELEG 6913 - P13 Cyber Security	x	x				x	x					x					x		x	x		
ELEG 6913 P20 Cloud Security						x	x					x					x			x		
ELEG 6913 - Web Application Security & Ethical Hacking				x		x							x	x			x			x		x
ELEG 6321 Digital Communicatio									x					x								
COMP 5313 Advanced Operating Systems								x													x	
ELEG 6324 Advanced Broadband Communications Systems			x		x	x	x			x	x					x				x		
ELEG 6320 Wireless Networks			x		x						x								x			

	Cybersecurity Foundational KUs (3)	
		} Aligned to PoS courses OR provide valid evidence - see below
	Technical Core KUs (5)	

	Optional KUs (7) (in row '3' replace numbers (1-7) with 3 letter code for your selected optional KU (which can include any of the non-technical Core KUs)

	Additional KUs (7) (in row '3' replace numbers {8-14 with 3 letter code for your selected optional KU (which can include any of the Non-Technical Core KUs or Optional KUs that were not used in the above seven Optional KUs)

	Graduate programs that elect to use the Graduate Thesis/Dissertation/Equivalent in lieu of the Additional seven (7) KUs, should provide evidence of institutional documentation and process for thesis/dissertation/equivalent (Criterion 1f)

	Graduate programs provide evidence that their students are admitted with foundational and core knowledge or it is included in the program. If valid evidence is provided, graduate programs are exempt from the three (3) Foundational KUs and five (5) Technical or Non-Technical Core KUs.

x	Place an 'x' at the intersection for every KU that is aligned with one/or more courses

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)