Cybersecurity

Master of Engineering: 30 Credits / 10 Courses

Students earning a Master of Engineering in cybersecurity take four core courses (one must be ENPM691), two cybersecurity electives and four technical electives. Technical electives must be approved by an academic advisor prior to registering. There is no research or thesis required for this degree.

Cybersecurity Required Core:		
	ENPM691 Hacking of C programs and Unix Binaries* (recommended for 1st semester)	(every fall and spring)

Cybersecurity Core (choose three):**		
	ENPM685 Security Tools for Information Security*	(every spring)
	ENPM686 Information Assurance*	(every spring)
	ENPM693 Network Security*	
	ENPM694 Networks and Protocols*	(every fall)
	ENPM695 Secure Operating Systems* [*ENPM691*]	(every spring)

Note: Any taken over the 3 required count as other cyber or technical electives

ENPM Cybersecurity Electives (choose two):**		
	ENPM687 Digital Forensics and Incidence Response*	(every summer)
	ENPM697 Secure Software Testing & Construction*	
	ENPM809A Applied Cryptography*	(every other fall)
	ENPM809I Embedded System Hacking and Security*	(every spring)
	ENPM809J Cloud Security*	
	ENPM809K Fundamentals of Artificial Intelligence and Deep Learning Framework*	
	ENPM809V Bitcoin and Cryptocurrency Technologies	
	ENPM809Q Penetration Testing	

Note: Any taken over the 2 required count as other technical electives

Cybersecurity Pre-approved Technical Electives (choose four):		
	ENPM611 Software Engineering*	(every fall)
	ENPM631 TCIP/IP Networking *[ENPM602]*	(every other fall)
	ENPM632 Advanced TCIP/IP Networks *[ENPM631]*	(every other spring)
	ENPM696 Reverse Software Engineering * [*ENPM691*]	(every fall)
	ENPM808L Analytics for Decision Support	
	ENPM808W Data Science	(every fall)
	ENPM809G Network Data Science	
	ENPM809R Software Defined Networking	
	ENPM808R Machine Learning Techniques Applied to Cybersecurity	

*NOTE: Any courses not listed above must be approved by the Senior Academic Advisor **PRIOR** to registration.*

***Students who entered prior to Fall 2018 can fulfill the requirements of their catalogue year or of the 2018-2019 year shown above, but must fulfill one or the other in its entirety. Please contact the Senior Academic Advisor with questions or concerns.*

KEY	
Online Option *	(offering information)
[Prerequisite course]	

DISCLAIMER: All offerings are tentative and subject to change. *Updated 4/2/2019*