

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)
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Cybersecurity Core (choose three):**

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

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

ENPM Cybersecurity Electives (choose two):**

ENPM657	Applied Cryptography*	(every other fall)
ENPM664	Embedded System Hacking and Security*	(every spring)
ENPM687	Digital Forensics and Incidence Response*	(every summer and fall)
ENPM697	Secure Software Testing & Construction*	(every spring)
ENPM809J	Cloud Security*	(Fall 2020, Summer 2021)
ENPM809K	Fundamentals of Artificial Intelligence and Deep Learning Framework*	
ENPM809V	Bitcoin and Cryptocurrency Technologies	(every other fall)
ENPM809Q	Penetration Testing	(Summer 2020, Fall 2021)

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

Cybersecurity Pre-approved Technical Electives (choose four):

ENPM611	Software Engineering*	(every fall and spring)
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	(every spring)
ENPM808R	Machine Learning Techniques Applied to Cybersecurity	(every spring)
ENPM808W	Data Science	(every fall)
ENPM809F	Internet of Things	(every fall)
ENPM809G	Network Data Science	
ENPM809R	Software Defined Networking	

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]	