MERCY UNIVERSITY

Academic Program Sequence Map

Program Degree Type and Name: BS/MS 4+1 in Cybersecurity   **Catalog Year:** 2023-2024

Program Level: Undergrad/Graduate   **Academic Term Type:** Semester

* Denote core course with an asterisk and (cc) next to the course number

Year and Term: Year 1 Fall term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Year and Term: Year 1 Spring term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)
Course Number & Title							Course Number & Title						
ENGL111: Written Engl and Lit Studies I	3	x					ENGL112: Written Engl and Lit Studies II	3	x				ENGL 111
CINQ 101 Critical Inquiry	3	x					MATH201: Precalculus	3	x				MATH 116
MATH116: College Algebra	3	x					CISC131: Foundations of Computing I	3	x			B or higher	
CISC120: Intro Computers & App Software	3	x					COMM 110 Oral Communication	3	x				
Gen Edu or ENGL 110	3	x					Gen Ed	3	x				
Term Credit Total:	15	15					**Term Credit Total:**	15	15				

Year and Term: Year 2 Fall term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Year and Term: Year 2 Spring term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)
Course Number & Title							Course Number & Title						
MATH244: Discrete Structures	3		x			MATH 201	MATH122: Statistics	3	x				MATH 116
CISC231: Foundations of Computing II	3		x			CISC/MATH 131	IASP 321: Linux Administration	3		x		B or higher	CISC 131
IASP230: Intro to Cybersecurity	3		x		B or higher	CISC131	IASP330: Dis. Recovery & Bus. Continuity	3		x			IASP 230
Gen Ed	3	x					Gen Ed	3	x				
Gen Ed	3	x					Gen Ed	3	x				
Term Credit Total:	15	9	6				**Term Credit Total:**	15	9	6			

Year and Term: Year 3 Fall term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Year and Term: Year 3 Spring term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)
Course Number & Title							Course Number & Title						
JRSM301 : Junior Seminar	3	x				ENGL112, SPCM110, MATH116	CISC385: Cryptography	3		x			MATH 244
CISC337: Database Management System	3		x			CISC 231	CISC335: Computer Network	3		x			CISC 231
IASP355: Pen. Testing & Ethical Hacking	3		x			IASP 221	IASP340 Security Policy and Procedures	3		x			
Gen Ed	3	x					Gen Ed	3	x				
Gen Ed	3	x					Major Elective	3		x			
Term credit total:	15	9	6				**Term Credit Total:**	15	3	12			

Year and Term: Year 4 Fall term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Year and Term: Year 4 Spring term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)
Course Number & Title							Course Number & Title						
IASP420: Network Security	3		x			CISC335	IASP470 : Capstone (System Sec.)	3		x			Six 300 upper level courses
IASP455: Sec. & Intel. Programming	3		x			CISC 231 & CISC339	IASP430: Digital Forensics	3		x			CISC 337 & IASP221
Major Elective	3		x				Major Elective	3		x			
IASP 500 Topics in Info. Security	3			x	B+ or higher		Graduate Legal/Mgmt Elective	3			x		
IASP 505 Found. of Cybersec. Sci.	3			X	B+ or higher		Graduate Application or Network Elective	3			x		
Term Credit Total:	15		9	6			**Term Credit Total:**	15		9	6		

Year and Term: Year 5 Fall Term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Year and Term: Year 5 Spring Term	CR	GE	Maj	OE	SM	Co / Prerequisite(s)
Course Number & Title							Course Number & Title						
Graduate Application or Network Elective	3		x				IASP 600: Master's Project (Capstone)	3		x			See Note2 below
Graduate Special Category Elective	3		x				Graduate Major Category Elective	3		x			
Graduate Major Category Elective	3		x				Graduate Major Category Elective	3		x			
Term Credit Total:	9		9				**Term Credit Total:**	9		9			

Program Totals	Credits: 138	General Education: 60	Major & Major Elective: 66	Open Elective: 12

Legend: **CR**: Credits   **GE**: General Education   **Maj**: Major / Major Elective   **OE**: Open Elective   **SM**: Success Marker   **Co/Prerequisite(s)**: List of co/ prerequites for noted course

Note 2: IASP500, IASP505, and at least one from each {Application, Network and Legal/Management Categories}

Note: (Major Categories are listed below)

Application Category	IASP520 Data Mining & Knowledge Discovery IASP525 Databases Security IASP530 Forensic Computing IASP565 Social Media & Security IASP 585 Applied Cryptography
Network Category	IASP550 Intrusion Detection & Prevention IASP555 Mobile Tech & Wireless Sensor Services IASP560 Wireless Network & Security
Legal/Management Category	IASP510 Social Implication of Info Security IASP540 IT Audit and Compliance IASP580 Security Audit & Compliance
Special Category	IASP590 Internship: Adv Topics in Sec Practice IASP595 Special Topics in Info Security IASP 599 Independent Study IASP601 Master's Thesis
Major Electives	9 credits can be taken from any of the Application, Network, Legal/Management Category, or Special Category)
Capstone Category	IASP 600 Master's Project