Mercy University

Academic Program Sequence Map

Program Degree Type and Name: **BS/MS 4+1 in Cybersecurity**   **Catalog Year:** **2024-2025**

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 — Credits Per Classification

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
ENGL111: Written Engl and Lit Studies I	3	x					
CINQ 101 Critical Inquiry	3	x					
MATH116: College Algebra	3	x					
CISC120: Intro Computers & App Software	3	x					
Gen Edu or ENGL 110	3	x					
Term Credit Total:	**15**	**15**					

Year and Term: Year 1 Spring term

Course Number & Title	CR	GE	Maj	OE	SM
ENGL112: Written Engl and Lit Studies II	3	x			
MATH201: Precalculus	3	x			
CISC131: Foundations of Computing I	3	x			B or higher
COMM 110 Oral Communication	3	x			
Gen Ed	3	x			
Term Credit Total:	**15**	**15**			

Year and Term: Year 2 Fall term — Credits Per Classification

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
MATH244: Discrete Structures	3		x			MATH 201	
CISC231: Foundations of Computing II	3	x				CISC/MATH 131	
IASP230: Intro to Cybersecurity	3		x		B or higher	CISC131	
Gen Ed	3	x					
Gen Ed	3	x					
Term Credit Total:	**15**	**9**	**6**				

Year and Term: Year 2 Spring term

Course Number & Title	CR	GE	Maj	OE	SM
MATH122: Statistics	3	x			
IASP 221: Linux Administration	3		x		B or higher
IASP330: Dis. Recovery & Bus. Continuity	3		x		
Gen Ed	3	x			
Gen Ed	3	x			
Term Credit Total:	**15**	**9**	**6**		

Year and Term: Year 3 Fall term — Credits Per Classification

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
JRSM301 : Junior Seminar	3	x				ENGL112, SPCM110, MATH116	
CISC337: Database Management System	3		x			CISC 231	
IASP355: Pen. Testing & Ethical Hacking	3		x			IASP 221	
Gen Ed	3	x					
Gen Ed	3	x					
Term credit total:	**15**	**9**	**6**				

Year and Term: Year 3 Spring term

Course Number & Title	CR	GE	Maj	OE	SM
CISC385: Cryptography	3		x		
CISC335: Computer Network	3		x		
IASP340 Security Policy and Procedures	3		x		
Gen Ed	3	x			
Major Elective			x		
Term Credit Total:	**15**	**3**	**12**		

Year and Term: Year 4 Fall term — Credits Per Classification

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
IASP420: Network Security	3		x			CISC335	
IASP455: Sec. & Intel. Programming	3		x			CISC 231 & CISC339	
Major Elective	3		x				
IASP 500 Topics in Info. Security	3			x	B+ or higher		
IASP 505 Found. of Cybersec. Sci.	3			X	B+ or higher		
Term Credit Total:	**15**		**9**	**6**			

Year and Term: Year 4 Spring term

Course Number & Title	CR	GE	Maj	OE	SM
IASP470 : Capstone (System Sec.)	3		x		
IASP430: Digital Forensics	3		x		
Major Elective	3		x		
Graduate Legal/Mgmt Elective	3			x	
Graduate Application or Network Elective	3			x	
Term Credit Total:	**15**		**9**	**6**	

Year and Term: Year 5 Fall Term — Credits Per Classification

Course Number & Title	CR	GE	Maj	OE	SM	Co / Prerequisite(s)	Milestone/Advice
Graduate Application or Network Elective	3		x				
Graduate Special Category Elective	3		x				
Graduate Major Category Elective	3		x				
Term Credit Total:	**9**		**9**				

Year and Term: Year 5 Spring Term

Course Number & Title	CR	GE	Maj	OE	SM
IASP 600: Master's Project (Capstone)	3		x		
Graduate Major Category Elective	3		x		
Graduate Major Category Elective	3		x		
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 GC: Gateway Courses CA: Career Activity ELC: Experiential Learning Course

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

Note: (Major Categories are listed below)

Academic Program Sequence Map

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

Mercy University   **Academic Program Sequence Map**

:dits Per Classification	
Co / Prerequisite(s)	Milestone/Advice
ENGL 111	
MATH 116	
	GC

:dits Per Classification	
Co / Prerequisite(s)	Milestone/Advice
MATH 116	
CISC 131	
IASP 230	

:dits Per Classification	
Co / Prerequisite(s)	Milestone/Advice
MATH 244	
CISC 231	

:dits Per Classification	
Co / Prerequisite(s)	Milestone/Advice
Six 300 upper level courses	CA/ELC
CISC 337 & IASP221	

:dits Per Classification	
Co / Prerequisite(s)	Milestone/Advice
See Note2 below	