

Checklist for Cybersecurity Major

We recommend students interested in the Cybersecurity major take CYB-115 in their first year at Assumption because it is part of the major required sequence CYB-115, 230, 235.

Required Courses (14)

Requirement	Course	Fall	Spring	Prerequisite	Semester Planned	Completed
Cybersecurity Fundamentals	CYB 115	x	x			
Intro. to Programming or Statistics Programming	CSC 117 CSC 120	x x	 x	Math 111 or placement at MAT 114 or higher		
Statistics	ECO 115 PSY 224 SOC 300	x x x	x x			
Networking and Data Communications	CSC/CYB 230	x		CYB 115, CSC 117 or CSC 120		
Securing Wired and Wireless Networks	CSC/CYB 235		x	CYB 115 and CSC/CYB 230		
Operating Systems Administration	CYB 265	x		CYB 115		
Operating Systems	CSC 303		x	CSC 117 or CSC 120		
Database Management Systems	CSC 321		x	CSC 117 or CSC 120		
Cryptography	CYB 304		x	CYB 235 (can be taken concurrently)		
Software and Application Security	CYB 318	x		CYB 235		
Computer, Network Forensics and Digital Investigations	CYB 328	x		CYB 235		
Ethical Hacking	CYB 338	x		CYB 235		
Preparing for Cyber Disasters	CYB 401		x	CYB 235 (can be taken concurrently)		
Independent Cybersecurity Project or Internship	CYB 438		x	Junior or Senior standing in CYB major or minor		

Suggested Schedule for Cybersecurity Major

See Assumption's Catalog for additional information, e.g. Foundations requirements.

First Year: Fall 20____	Spring 20____
1. CYB 115 Cybersecurity Fundamentals (CYB 115 should be completed by the end of 1st year)	1. Statistics (ECO 115, PSY 224, or SOC 300 - Fall only)
2. CSC 117 Intro to Programming (Fall) or CSC 120 Stats Programming (any semester)	2.
3.	3.
4.	4.
5.	5.

Second Year: Fall 20____	Spring 20____
1. CSC/CYB 230 Networking and Data Communications (Fall)	1. CSC/CYB 235 Securing Wired and Wireless Networks (Spring)
2. CYB 265 Operating Systems Administration (Fall)	2. CSC 303 Operating Systems (Spring)
3.	3. CSC 321 Database Management Systems (Spring) (okay to move to 3rd year)
4.	4.
5.	5.

Third Year: Fall 20____	Spring 20____
1. CYB 318 Software and Application Security (Fall)	1. CYB 304 Cryptography (Spring)
2. CYB 328 Computer, Network Forensics and Digital Investigations (Fall)	2. CYB 401 Preparing for Cyber Disasters (Spring)
3.	3.
4.	4.
5.	5.

Fourth Year: Fall 20____	Spring 20____
1. CYB 338 Ethical Hacking (Fall)	1. CYB 438 Independent Cybersecurity Project or Internship
2.	2.
3.	3.
4.	4.
5.	5.