College of Computer, Mathematical and Natural Sciences

Comp. Sci. - Cybersecurity Track Effective Fall 2024

This is a curriculum tracking sheet, not an official audit

Name_____ **UID**_____

Date Entered Major_____ **Second degree/major**_____ **Is CMNS first major? Y/N**

General Education Requirements

Fundamental Studies

Requirement		*Course*	*Credits*	*Completed?*
AW	Academic Writing (before 30 credits)		3	
PW	Professional Writing (after 60 credits)		3	
OC	Oral Communication		3	

Distributive Studies

Requirement		*Course*	*Credits*	*Completed?*
NL	Natural Science with Lab		4	
NS	Natural Science		3 or 4	
HS	History and Social Sciences		3	
HS	History and Social Sciences		3	
HU	Humanities		3	
HU	Humanities		3	
SP	Scholarship in Practice (non-major)		3	
SP	Scholarship in Practice (non-major)		3	

Big Question

Overlap with Distributive Studies and/or Big Question

Requirement		*Course*	*Credits*	*Completed?*
IS	Big Question			
IS	Big Question			

Diversity

Can overlap with Distributive Studies or Big Question

Requirement		*Course*	*Credits*	*Completed?*
UP	Understanding Plural Societies			
UP or CC	Understanding Plural Societies or Cultural Competence			

Gen Ed Mathematics (MA) and Analytic Reasoning (AR) are satisfied by major requirements.

Upper Level Concentration

Students must complete a minimum of 12 credit hours of 300 - 400 level courses in one discipline outside of Computer Science. No course that is in, or cross-listed as, CMSC may be counted in this requirement. Only 1 independent study or experiential learning course may be used. Students who are pursuing a minor or a second major can use those credits in this area. Consult with your academic advisor to ensure each course you plan to take will satisfy this area.

Course	*Credits*	*Completed?*

Elective Credits

Students must take enough elective courses in any discipline(s) they choose to reach the total number of 120 credits required for graduation. Students who are pursuing a minor or a second major can use those credits in this area.

Course	*Credits*	*Completed?*

Major Requirements

Lower Level Requirements (Must pass with a grade of C- or higher)

Title	*Course*	*Credits*	*Completed?*
Calculus I	MATH 140	4	
Calculus II	MATH 141	4	
Object-Oriented Programming I Programming with Purpose I: Data-Centric Computing	CMSC 131 or CMSC 141	4	
Object-Oriented Programming II Programming with Purpose II: Data Structures and Algori	CMSC 132 or CMSC 142	4	
Introduction to Computer Systems	CMSC 216	4	
Discrete Structures	CMSC 250	4	
Organization of Programming Languages	CMSC 330	3	
Algorithms	CMSC 351	3	
STAT 4xx with MATH 141 prerequisite	STAT 4XX	3	
MATH/AMSC/STAT xxx with MATH 141 prerequisite		3 or 4	

Upper Level Courses (Must pass with a grade of C- or higher)

Students must fulfill their computer science upper level course requirements from at least 3 areas

Required:	*Course*	*Credits*	*Completed?*
Computer and Network Security	CMSC 414	3	
Cryptology	CMSC 456	3	

Choose four courses from:			
Computer Systems Architecture	CMSC 411	3	
Operating Systems *	CMSC 412	4	
Computer Networks	CMSC 417	3	
Introduction to Compilers	CMSC 430	3	
Programming Language Technologies and Paradigms	CMSC 433	3	
Design and Analysis of Computer Algorithms	CMSC 451	3	

* Indicates course has unique prerequisites

Upper Level Elective Courses (Must pass with a grade of C- or higher)

Select 3 credits from CMSC 300- or 400-level courses (not eligible CMSC330 & CMSC351)

Title	*Course*	*Credits*	*Completed?*

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Computer Science - Cybersecurity Track Effective Fall 2024

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Year 1	Fall			Spring		
Gateway & Benchmark 1 Requirements: CMSC131, CMSC132, and MATH140 must be completed with a C- or higher by 45 credits (AP/IB credits excluded)	Course	Credit	Grade	Course	Credit	Grade
	CMSC131 or CMSC141	4		CMSC132 or CMSC142	4	
	MATH140 (FSMA, FSAR)	4		MATH141	4	
	ENGL101 (FSAW)	3		Natural Science w/ Lab (DSNL)	4	
	Oral Comm (FSOC)	3		History & Social Science (DSHS)*	3	
	CMSC100	1				
	Total	15		Total	15	

Year 2	Fall			Spring		
Benchmark 2 Requirements: CMSC330, CMSC351, and MATH or STAT must be completed with a C- or higher by 75 credits (AP/IB credits excluded)	Course	Credit	Grade	Course	Credit	Grade
	CMSC216	4		CMSC330	3	
	CMSC250	4		CMSC351	3	
	MATH/STAT/AMSC	3 or 4		STAT4XX	3	
	Scholarship in Practice (DSSP)*	3		Natural Science (DSNS)	3	
				Humanities (DSHU)*	3	
	Total	14 or 15		Total	15	

Year 3	Fall			Spring		
	Course	Credit	Grade	Course	Credit	Grade
	CMSC414	3		CMSC4XX	3	
	CMSC456	3		CMSC4XX	3	
	History & Social Sciences (DSHS)*	3		ENGL39X (FSPW)**	3	
	Humanities (DSHU)*	3		Scholarship in Practice (DSSP)*	3	
	Big Question (SCIS)	3		Big Question (SCIS)	3	
	Total	15		Total	15	

Year 4	Fall			Spring		
	Course	Credit	Grade	Course	Credit	Grade
	CMSC4XX	3		CMSC Elective	3	
	CMSC4XX	3		UL Concentration	3	
	UL Concentration	3		UL Concentration	3	
	UL Concentration	3		Plural Societies (DVUP) or Cultural Competence (DVCC)*	3	
	Plural Societies (DVUP)*	3		Elective	3 or 4	
	Total	15		Total	15 or 16	

*All students must complete two Distributive Studies courses that are approved for Big Question courses. The Understanding Plural Societies (UP) and Cultural Competence (CC) courses may also fulfill Distributive Studies categories.

**Students may take any Professional Writing course to fulfill this requirement.