

Northwest Missouri State University School of Computer Science and Information Systems School of Computer Science and Information Systems – Cybersecurity **Bachelor of Science**

Term 1	Course Title/Description	Pre-requisite	Cr	Milestone/Notes
			Hrs	
44-101	Foundations of Computing		3	
44-141	Computer Programming I	2 units of high school algebra and either CSIS 44101 OR CSIS 44130 with a grade of C or better, or School director's permission	3	
29-102	Fund. of Oral Communication		3	
10-111	Composition I		3	
08-103	General Psychology		3	
77-101	University Seminar		1	
		Total Hours	16	
Term 2	Course Title/Description	Pre-requisite	Cr	Milestone/Notes
			Hrs	
10-112	Composition II	ENGL 10-111	3	
17-117	Precalculus	A minimum ACT Math score of 22, or a minimum high school GPA of 3.5	4	
44-241	Computer Programming II	CSIS 44141 with a grade of C or better	3	
44-181	Intro to Cybersecurity	CSIS 44101 or CSIS 44130 with a grade of C or better	3	
44-356	Network Fundamentals	CSIS 44130 or CSIS 44101 with a grade of C or better	3	
		Total Hours	16	
Term 3	Course Title/Description	Pre-requisite	Cr	Milestone/Notes
			Hrs	
39-275	Professional Ethics		3	
44-242	Data Structures	CSIS 44241, and MATH 17114 or MATH 17117 or MATH 17118 or MATH 17120 (or concurrent enrollment), all with a grade of C or better, or consent of instructor	3	
44-296	Professional Development Sem.	Sophomore standing and CSIS 44141	3	
17-114	General Statistics	An ACT Math score of 22 or higher, high school GPA of 3.00 or higher, or a minimum grade of C in MATH 17082, or concurrent enrollment in MATH 17014	3	
	Physical Sciences/Lab		4	
		Total Hours	16	

⁼ a milestone course completed by end of year 1 to remain on pace to finish degree requirements in four years.

= a milestone course completed by end of year 2 to remain on pace to finish degree requirements in four years.

= a milestone course completed by end of year 3 to remain on pace to finish degree requirements in four years.

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Term 4	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
44-345	Computer Organization	CSIS 44242, with a grade of C or better, and one semester of chemistry, physics, or physical science	3	
44-460	Database Systems	CSIS 44241, with a grade of C or better	3	
44-249	Building Blocks of Theoretical CS	Sophomore standing and a minimum grade of C in CSIS 44141 and any of the following: MATH 17117 or MATH 17120.	3	
	Life Sciences/Lab		4	
	Civics-History		3	
	Total Hour			
Term 5	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
44-382	Secure Programming	CSIS 44242 and CSIS 44356 with a grade of C or better	3	
44-386	Digital Forensics	CSIS 44241, CSIS 44296 and CSIS 44356 with a grade of C or better.	3	
44-359	Secure System Admin	CSIS 44356 with a minimum grade of C	3	
	Humanities		3	
	Social & Behavioral Sciences		3	
Total Hours			15	

Term 6	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
	300+ Elective		3	
44-349	Survey of Algorithms	CSIS 44242 and CSIS 44249 each with a grade of C or better	3	
	Fine Arts		3	
44-481	Ethical Hacking	CSIS 44382 and CSIS 44296 with a grade of C or better	3	
	Elective		3	
Total Hours			15	
Term 7	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
44-550	Operating Systems	CSIS 44345, with a grade of C or better	3	
34-102	Intro to Government		3	
	300+ Elective		4	
	Elective		3	

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		Total Hours	13	
Term 8	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
10-110	Intro to Literature		3	
44-484	Cyber Risk Management and Incident Response	CSIS 44386 with a grade of C or better.	3	
44-457	Applied Cryptography	CSIS 44356 and CSIS 44349, each with a minimum grade of C.	3	
	Electives		4	
Total Hours			13	

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