

Northwest Missouri State University School of Computer Science and Information Systems General Emphasis Bachelor of Science

Term 1	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
77-101	University Seminar		1	
10-111	Composition I		3	
29-102	Fundamentals of Oral Communication		4	
44-101	Foundation 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	
		Total Hours	14	
Term 2	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
10-112	Composition II	ENGL 10-111	3	
17-118	Pre-Calculus Algebra (Option B)*	An ACT Math score of 22 or higher, or a score of PASS on the NW Algebra Review, or a minimum grade of C in MATH 17082, or concurrent enrollment in MATH 17018	3	
44-241	Computer Programming II	CSIS 44141 with a grade of C or better	3	1
	Fine Arts		3	
	Life Sciences/ Lab		4	
		Total Hours	16	
Term 3	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
44-356	Network Fundamentals	CSIS 44130 or CSIS 44101 with a grade of C or better	3	2
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	2
44-296	Professional Development Seminar	Sophomore standing and CSIS 44141	3	
17-114	General Stats (Option B)*	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	
Term 4	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
44-460	Database Systems	CSIS 44241, with a grade of C or better	3	2
44-345	Computer Organization	CSIS 44242, with a grade of C or better, and one semester of chemistry, physics, or physical science	3	Spring only
34-102	Intro to American Government & Politics		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 17118 or MATH 17120	3	2
	Humanities		3	
	1	1		1

⁼ 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.

= a milestone courses taken in final year to complete degree requirements.



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		Total Hours	15	
Term 5	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
	Civics- History		3	
17-316	Linear Stat Model I (Option B)*	A minimum grade of C in either MATH 17114 or MATH 17230, or consent of instructor	3	
	Approved CS/IS Electives (300+ Level)		6	
	Social & Behavioral Sciences		3	
		Total Hours	15	
Term 6	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
10-220	Intro to Literature	·	3	
44-349	Survey of Algorithms	CSIS 44242 and CSIS 44249 each with a grade of C or better	3	Spring only
	Approved CS/IS Electives		6	
	Humanities		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	Fall only
44-525	Theory & Imp Programming Language	CSIS 44242 and CSIS 44249, with grades of C or better, or consent of instructor	3	Fall only
44-561	Software Engineering Principles	Prerequisites: CSIS 44242 and CSIS 44460 with a grade of C or better	3	Fall only
	Approved CS/IS Elective		3	
	Elective		3	
		Total Hours	15	
Term 8	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
	Approved CS/IS Elective		3	
44-562	Software Engineering II	CSIS 44561 with a grade of C or better	3	Spring only
	Social & Behavioral Sciences		3	
	Electives		5	
	Electives		J	

^{*}Schedule shows Math Option B. Students may elect for Math Option A instead. If Math Option A is chosen, then make the following substitutions:

- Spring year 1-replace 17-118 Pre-calculus Algebra with 17-117 Pre-calculus (4hours)
- Fall year 2-replace 17-114 General Statistics with 17-120 Calculus (4 hours)
- Fall year 3-replace 17-316 Linear Stat Model I with 17-230 Probability and Statistics

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 - = a milestone course completed by end of year 3 to remain on pace to finish degree requirements in four years.
 - **\(\)** = a milestone courses taken in final year to complete degree requirements.

^{**}Taking Fundamentals of Classical Physics I & Lab (5 hours) will reduce elective hours by 1.