

Mississippi Valley State University Department of Mathematics, Computer and Information Sciences Major: Computer Science (Computer Science Track) Catalog Year: 2021-2023

Degree Requirements	Details
Total Credit Hours	120/121 credit hours
Grade Point Average (GPA)	2.0 GPA
Residency Rule	Complete a minimum of 25% of the total credit hours requirement of the degree program at MVSU.
"D' Policy	Students are allowed one (1) "D" in major courses.
Academic Advisor	
Student Name	
Studnet ID#	

ACADEMIC MAP

General Core Curriculum	Course Number	Credit Hours	Semester Offered	General Core Curriculum	Course Number	Credit Hours	Semester Offered
English Composition	EN 101 EN 102	6	FA & SP	Social and Behavioral Sciences: Economics,		6	FA & SP
Humanities: History and English Literature Students must take (6hrs EN Lit & 3hrs HI or 6hrs HI		9	FA & SP	Geography, Political Science, Psychology, Public Administration and Sociology			
& 3hrs EN Lit)				Speech	SP 201	3	FA & SP
Fine Arts	AR 101 TH 201	3	FA & SP	Health and Physical	HL 101, PE 102	2/3	FA & SP
	MU 107			Education or ROTC	or MS 101		FA & SP
Orientation	FY 101	1	FA & SP				FA & SP
Natural Science		6/8	FA & SP	College Algebra or Higher Level Mathematics		3	

Subtotal 39/42

Semester 1	Course Number	Credit Hours	Semester Offered	Semester Year/Taken	Grade Earned	Also Allowed	Pre/Co-requisites
English Composition - Freshman Composition	EN 101	3	FA &SP				EN 100B or English Score of 17
Fine Arts	See Above	3	FA & SP			MU 107 TH 201	
Humanities I	See Above	3	FA & SP				
College Algebra or Higher Level Mathematics- Calculus I	MA 299	3	FA & SP				MA 111, MA 150, or Math Score of 22
Survey of Computer Science	CS 112	3	FA & SP				Must be a CS, MA or MA Education Major
Orientation	CS 191	1	FA & SP			FY 101	
	Total Hours	16					

Semester 2	Course Number	Credit Hours	Semester Offered	Semester Year/Taken	Grade Earned	Also Allowed	Pre/Co-requisites
Freshman Composition	EN 102	3	FA &SP				EN 101
Health and Physical Education or ROTC	See Above	2/3	FA & SP				
Social & Behavioral Sciences I	See Above	3					
Calculus II	MA 300	3	FA & SP				MA 299
Computer Programming I	CS 203	3	FA & SP				CS 112
Computer Seminar	CS 192	1	SP				Must be a CS Major
	Total Hours	15/16					

Semester 3	Course Number	Credit Hours	Semester Offered	Semester Year/Taken	Grade Earned	Also Allowed	Pre/Co-requisites
Computer Programming II	CS 204	3	FA & SP				CS 203
Natural Sciences I - Physics I	PH 211	4	FA				MA 111 and MA 112
Natural Sciences I Lab - Physics I Lab	PH 211L	0	FA				PH 211
Discrete Structures	CS 341	3	FA				MA 300
Humanities II	See Above	3					
Calculus III	MA 301	3	FA & SP				MA 300
	Total Hours	16					

Semester 4	Course Number	Credit Hours	Semester Offered	Semester Year/Taken	Grade Earned	Also Allowed	Pre/Co-requisites
Humanities III	See Above	3	FA & SP				
Natural Sciences II - Physics II	PH 212	4	SP				PH 211 and PH 212L
Natural Sciences II Lab - Physics II Lab	PH 212L	0	SP				PH 212
Data Structures	CS 205	3	FA & SP				CS 204
Java or Visual Basic Programming	CS 221* or CS 231**	3	SP				CS 203
Speech - Fundamentals of Public Speaking	SP 201	3	FA & SP				
	Total Hours	16	* Offered Every Odd Year ** Offered every Even Year				en Year

Semester 5	Course Number	Credit Hours	Semester Offered	Semester Year/Taken	Grade Earned	Also Allowed	Pre/Co-requisites	
Database Management Systems	CS 351	3	FA				CS 204	
Social & Behavioral Sciences II	See Above	3						
Computer Architecture	CS 321	3	FA				CS 204	
Introduction to Algorithms	CS 323	3	FA				CS 205	
General Biology I (Zoology)	BI 111	3	FA FA			BI 112 CH 111	BI 111L	
General Biology I (Zoology) Lab	BI 111L	1	FA FA			BI 112L CH 111L	BI 111	
Social & Ethical Issues in CS	CS 398***	1	FA				Must be a SO or JR and a Computer Science Major	
	Total Hours	17	*** Offered Every Odd Year Fall Semester					

Semester 6	Course Number	Credit Hours	Semester Offered	Semester Year/Taken	Grade Earned	Also Allowed	Pre/Co-requisites
Principles of Programming Languages	CS 350	3	SP				CS 205
Operating Systems	CS 371	3	SP				CS 205 and CS 321
Linear Algebra	MA 331	3	SP				MA 300
Ordinary & Partial Differential Equations	MA 421	3	SP				MA 300
Software Engineering	CS 425	3	SP				CS 351
	Total Hours	15					•

Semester 7	Course Number	Credit Hours	Semester Offered	Semester Year/Taken	Grade Earned	Also Allowed	Pre/Co-requisites
Math Elective	See Below	3	FA				Math electives must be 300 or above
Introduction to Networking	CS 422	3	FA				CS 371
Senior Project	CS 455	3	FA				Must be a Senior and a Computer Science Major
Introduction to Cyber Security	CS 423	3	FA				CS 371
	Total Hours	12					

Semester 8	Course Number	Credit Hours	Semester Offered	Semester Year/Taken	Grade Earned	Also Allowed	Pre/Co-requisites
Probability & Statistics	MA 325	3	SP				MA 300
Numerical Analysis	CS 431	3	SP				CS 205 and MA 301
Language & Compilers	CS 441	3	SP				CS 350
Elective		3					
Computer Seminar	CS 492	1	SP				Must be a Senior and a Computer Science Major
	Total Hours	13		•			

Spring MA Electives: MA 302, MA 303, MA 305, MA 318, and MA 402 $\,$

Substitutions										
Required Course Number Substituted Course Number Grade Semester										
Required Course Number	Substituted Course Number	Grade	Semester							
Required Course Number	Substituted Course Number	Grade	Semester							

	Other Courses										
Course Number	Semester	Grade	Course Number	Semester	Grade	Course Number	Semester	Grade			