Mississippi Valley State University

ACADEMIC MAP

Department of Mathematics, Computer and Information Sciences

Major: Computer Science with Concentration in 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	
Student ID#	

General Core Curriculum	Course Number	Credit Hours	Semester Offered
English Composition	EN 101 EN 102	6	FA & SP
Humanities: History and English Literature *Students must take (6hrs EN Lit & 3hrs HI or 6hrs HI & 3hrs EN Lit)*		9	FA & SP
Fine Arts	AR 101 or MU 107 or TH 201	3	FA & SP
Orientation	FY 101	1	FA & SP
Natural Science		6/8	FA & SP

General Core Curriculum	Course Number	Credit Hours	Semester Offered
Social and Behavioral Sciences: Economics, Geography, Political Science, Psychology, Public Administration and Sociology		6	FA & SP
Speech	SP 201	3	FA & SP
Health and Physical Education or ROTC	HL 101 or PE 102 MS 101	2/3	FA & SP
College Algebra or Higher Level Mathematics		3	FA & SP

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				
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			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, S2				EN 101
Health, 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 - 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 - 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.**				

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
BI 111 (Zoology)	BI 111	3	FA FA			BI 112 CH 111	BI 111L
BI 111L (Zoology) Lab	BI 111L	1	FA FA			BI 112L CH 111L	BI 111
Social & Ethical Issues in Computer Science	CS 398***	1	FA				Must be a SO or JR and 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 above	3	FA				Math electives must be300 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					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