

# Suggested Transfer Pathway Montgomery College A.A. in Computer Science to Virginia Polytechnic and State University B.S. in Computer Science

Total Credits: 62, Catalog Year: 2022-2023

	Cr	
ENGL101 College Writing (or Elective)	3	ENGL102 Critical Reading, Writing and Research
CMSC140 Introduction to Programming	3	MATH182 Calculus II
MATH181 Calculus I	4	CMSC203 Computer Science I
Arts Distribution (ARTD)	3	Arts/Humanities (ARTD/HUMD) or Health course
Behavioral and Social Sciences Distribution **	3	(HLTH)
Total Credits	16	Total Credits
31 - 62 Credits – Montgomery College		
	Cr	
CMSC204 Computer Science II	4	COMM108 Foundations of Human
CHEM131 Principles of Chemistry (NSLD)	4	Communication (GEIR)
Behavioral and Social Sciences Distribution*	3	CHEM132 Principles of Chemistry II
Humanities Distribution (HUMD	3	CMSC207 Introduction to Discrete Structures
	3	Program Elective (MATH 284 suggested)
Program Elective (MATH280 suggested)		

\* BSSD courses must come from different disciplines.

#### Year Three – Virginia Tech

Fall Semester	Cr	Spr
MATH3134 Combinatorics	3	Stat
CS2506 Intro to Computer Organization II	3	CS3
CS3114 Data Structures and Algorithms	3	Upp
CLE (Areas 2,3, or 7)	3	CS3
Professional Writing Elective	3	CLE
 Total Credits	16	Tot

Spring Semester	Cr
Statistics Elective	3
CS3214 Computer Systems	3
Upper-level CS Elective	3
CS3604 Professionalism in Computing	3
CLE (Areas 2, 3, or 7)	3
 Total Credits	15

#### Year Four – Virginia Tech

Fall Semester	Cr
CS3304 Comparative Languages	3
CS41X4 Theory Course	3
Upper-level CS Elective	3
CS Technical Elective	3
Free Elective	3
Total Credits	15

Spring Semester	Cr
CS4944 Senior Seminar	1
CS4XXX Capstone	3
CS4XXX Elective	3
CLE (Area 6)	3
Free Elective	4
Total Credits	14

CLE Area 2: Ideas, Cultural Traditions, Values electives

CLE Area 3: Society & Human Behavior electives

CLE Area 6: Creativity & Aesthetic Experience elective

CLE Area 7: Global Issues Elective

If a CLE course is double-counted to satisfy two different CLE areas, a free elective(s) must be taken to maintain a minimum of 123

## MC A.A. in Computer Science to Virginia Tech B.S. in Computer Science

Total Credits: 62, Catalog Year 2022-2023

Name:	Date:	ID#	
General Education Courses	COURSE	HRS	GRADE
English Foundation (ENGL102, Critical Reading, Writing and Research)	ENGL102	3	
Math Foundation (Calculus I)	MATH181	4	
Distribution Courses	COURSE	HRS	GRADE
NSND: Principles of Chemistry	CHEM131	4	
NSLD: Principles of Chemistry II	CHEM132	4	
Arts Distribution		3	
Behavioral and Social Sciences Distribution *		3	
Behavioral and Social Sciences Distribution *		3	
Humanities Distribution		3	
General Education Elective	COURSE	HRS	GRADE
Foundations of Human Communication	COMM108	3	
Program Requirements	COURSE	HRS	GRADE
ENGL101 (if needed for ENGL102/ENGL103, general elective if not)		3	
Calculus II	MATH182	4	
Arts/Humanities (ARTD/HUMD) or Health course (HLTH)			
Area of Concentration Requirements	COURSE	HRS	GRADE
Introduction to Programming	CMSC140	3	
Computer Science I	CMSC203	4	
Computer Science II	CMSC204	4	
Introduction to Discrete Structures	CMSC207	4	
Program Elective (MATH280 suggested)		3	
Program Elective (MATH284 suggested)		4	

\* BSSD courses must come from different disciplines

### MC A.A. in Computer Science to Virginia Tech B.S. in Computer Science Equivalency Chart

MC Course	Credits	VT Course	Credits
CMSC 140 Intro to Programming	3	CS1044 Intro to Programming in C	3
ENGL101 Intro to College Writing (ENGF)	3	First-Year Writing	3

MATH181 Calculus I (MATF)	4	Calculus of a Single Variable	4
Arts Distribution (ARTD)	3	Pathways 6A	3
Behavioral and Social Sciences Distribution (BSSD)*	3	Pathways 3	
CMSC203 Computer Science I	4	CS114 Intro to Software Design	3
MATH182 Calculus II	4	MATH1226 Calculus of a Single Variable	4
ENGL102 Critical Reading/Writing/Research (ENGF)	3	First-Year Writing	3
Art/Humanities Distribution (ARTD/HUMD) or Health Course (HLTH)	3	Pathways 2 or 7	3
CMSC204 Computer Science II	4	CS2114 Software Design and Data Structure	3
Humanities Distribution (HUMD)	3	Pathways 2	
CHEM131 Principles of Chemistry I (NSLD)	4	CHEM 1035+1045 General Chemistry+Lab	4
Program Elective (MATH280)	3	MATH2204 Multivariable Calculus	3
COMM108 Foundations of Human Communication (GEIR)	3	COMM2004 Public Speaking	3
CMSC207 Introduction to Discrete Structures	4	MATH2534 Intro to Discrete Math	3
Behavioral and Social Sciences Distribution (BSSD)*	3	Pathways 3	3
CHEM132 Principles of Chemistry II (NSLD)	4	CHEM1036+1046 General Chemistry+Lab	4
Program Elective (MATH284)	4	MATH2114 Linear Algebra	3

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