

A.S. Computer Science

ADVANCE Program Milestones

1. Students must take SDV 100 or SDV 101 in the first semester at NOVA.
2. Students must begin Developmental coursework in the first semester in ADVANCE at NOVA.
3. Students must take first college-level MTH course and ENG 111 in the semester immediately following the completion of any MTT or ENF courses (excluding summer).
4. In the first 30 credits, students must:
 - a. Complete ENG 111 and ENG 112 with a C or better.
 - b. Complete the first college-level MTH course with a C or better.
5. Students must pass all Mathematics and Computer Science courses with a C or better.
6. Students must complete at least six degree-applicable credits with a C or better each fall and spring semester.
7. Students must maintain a 2.5 cumulative GPA.
8. Students must apply for NOVA graduation and complete their Associate's degree.

Computer Science Admission Requirements: All transfer applicants must have earned at a least B in CSC 201 or CSC 202, AND must have earned at least a B in one of the following: MTH 263, MTH 264, or MTH 288.

	NOVA DEGREE REQUIREMENT	Credits	Courses	MASON TRANSFER EQUIVALENT	MASON CORE/DEGREE EQUIVALENT
1	SDV Course	1	SDV 100 College Success Skills OR SDV 101 Orientation to XXX	UNIV 100	Elective
2	ENG 111	3	ENG 111 College Composition I	ENGH 101	Written Comm
3	Social/Behaviorial Science #1	3	HIS 101 History of Western Civilization I OR	HIST 101	Western Civ
			HIS 102 History of Western Civilization II OR HIS 112 History of World Civilization II	HIST 102 HIST 125	
4	MTH 167	5-6	MTH 167 Precalculus with Trigonometry (if needed) OR	MATH 105	Elective
			MTH 288 Discrete Mathematics AND	MATH 125	Major
			MTH 266 Linear Algebra	MATH 203	Major
5	CSC 200*	4	CSC 200 Introduction to Computer Science* OR	CS XXX	Elective
			MTH 265 Calculus III	MATH 213	Major
6	ENG 112	3	ENG 112 College Composition II	ENGH XXX	Elective
7	MTH 263	4	MTH 263 Calculus I	MATH 113	Major
8	CST Course	3	CST 100 Principles of Public Speaking OR	COMM 100	Oral Comm
			CST 110 Introduction to Communication	COMM 101	
9	Humanities/Fine Arts #1	3	ART 100 Art Appreciation OR	ARTH 101	Arts
			ART 101 History and Appreciation of Art I OR	ARTH 200	
			ART 102 History and Appreciation of Art II OR	ARTH 201	
			CST 130 Introduction to Theatre OR	THR 101	
			CST 151 Film Appreciation I OR MUS 121 Music Appreciation I	ENGH L372 MUSI 101	
10	CSC 201	4	CSC 201 Computer Science I	CS 112	Major
11	MTH 264	4	MTH 264 Calculus II	MATH 114	Major
			ECO 201 Principles of Macroeconomics OR	ECON 104	Soc/Behav
			ECO 202 Principles of Microeconomics OR	ECON 103	
			GEO 210 Introduction to Cultural Geography OR	GGG 103	
			HIS 121 United States History I OR	HIST 121	
			HIS 122 United States History II OR	HIST 122	
			PLS 135 American National Politics OR	GOVT 103	
			PLS 211 United States Government I OR	GOVT 103	
			PSY 200 Principles of Psychology OR	PSYC 100	
			SOC 200 Principles of Sociology OR	SOCI 101	
SOC 211 Principles of Anthropology I	ANTH 114				

13	Science Course #1**	4-5	BIO 101 General Biology I OR CHM 111 General Chemistry I OR PHY 231 General University Physics I OR GOL 105 Physical Geology	BIOL 103 CHEM 211-213 PHY 160-161-266 GEOL 101	Natural Science
14	CSC 202	4	CSC 202 Computer Science II	CS 211	Major
15	Computer Science Elective***	3-4	CS 110 Essentials of Computer Science (co-enrollment course)*** OR MTH 265 Calculus III OR MTH 288 Discrete Mathematics OR MTH 266 Linear Algebra	CS 110 MATH 213 MATH 125 MATH 203	Major
16	Social/Behavioral Sciences #3	3	GEO 220 World Regional Geography OR HIS 111 History of World Civilization I OR PLS 140 Introduction to Comparative Politics OR PLS 241 International Relations I OR PSY 219 Cross-Cultural Psychology	GGG 101 HIST L387 GOVT 133 GOVT 132 PSYC L379	Global
17	Humanities/Fine Arts #2	3	ENG 236 Introduction to the Short Story OR ENG 241 Survey of American Literature I OR ENG 242 Survey of American Literature II OR ENG 251 Survey of World Literature I OR ENG 252 Survey of World Literature II OR ENG 253 Survey of African-American Literature I	ENGH 202	Literature
18	Science Course #2**	4-5	BIO 102 General Biology II OR CHM 112 General Chemistry II OR PHY 232 General University Physics II OR GOL 106 Historical Geology	BIOL 107-106 CHEM 212-214 PHY 260-261-XXX GEOL 102	Major

A. S. COMP SCIENCE DEGREE TOTAL 61-63

For academic policies and procedures, please see NOVA catalog - <http://www.nvcc.edu/catalog/index.html>

B.S. Computer Science

	MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE EQUIVALENT
19	Gen Ed: Written Communication (UL)	3	ENGH 302 Advanced Composition (Natural Science Section)	Written Comm
20	Additional Natural Science**	4	BIOL 103 Introductory Biology I OR BIOL 106 & 107 Introductory Biology II Lecture & Lab OR CHEM 211 & 213 General Chemistry I Lecture & Lab OR CHEM 212 & 214 General Chemistry II Lecture & Lab OR PHYS 160/161 University Physics I Lecture & Lab OR PHYS 260/261 College Physics I Lecture & Lab OR GEOL 101 Introductory Geology I OR GEOL 102 Introductory Geology II	Major
21	Computer Science Core Requirements	0-3	CS 110 Essentials of Computer Science (<i>if not taken through co-enrollment</i>)	Major
22	Computer Science Core Requirements	3	CS 262 Introduction to Low-Level Programming	Major
23	Computer Science Core Requirements	3	CS 306 Synthesis of Ethics and Law for the Computing Professional	Major
24	Computer Science Core Requirements	3	CS 310 Data Structure	Major
25	Computer Science Core Requirements	3	CS 321 Software Engineering	Major
26	Computer Science Core Requirements	3	CS 330 Formal Methods and Models	Major
27	Computer Science Core Requirements	4	CS 367 Computer Systems and Programming	Major
28	Computer Science Core Requirements	3	CS 471 Operating Systems	Major
29	Computer Science Core Requirements	3	CS 483 Analysis of Algorithms	Major

30	Computer Science Core Requirements	3	CS 455 Computer Communications and Networking OR CS 468 Secure Programming and Systems OR CS 475 Concurrent and Distributed Systems	Major
31	Computer Science Core Requirements	3	Approved Senior Computer Science Elective****	Major
32	Computer Science Core Requirements	3	Approved Senior Computer Science Elective****	Major
33	Computer Science Core Requirements	3	Approved Senior Computer Science Elective****	Major
34	Computer Science Core Requirements	3	Approved Senior Computer Science Elective****	Major
35	Mathematics/Statistics Requirement	3	STAT 344 Probability and Statistics for Engineers and Scientists I	Major
36	Computer Science Core Requirements	3	Approved Computer Science Related-Course Elective****	Major
37	Computer Science Core Requirements	3	Approved Computer Science Related-Course Elective****	Major
38	Math/Statistics Requirement	0-3	If not completed at NOVA: MATH 125 Discrete Mathematics I OR MATH 203 Linear Algebra OR MATH 213 Analytics Geometry and Calculus III	Major
39	Math/Statistics Requirement	0-3	If not completed at NOVA: MATH 125 Discrete Mathematics I OR MATH 203 Linear Algebra OR MATH 213 Analytics Geometry and Calculus III	Major
40	Mathematics/Statistics Requirement or General Elective	3	MATH 125 Discrete Mathematics I OR MATH 203 Linear Algebra OR MATH 213 Analytics Geometry and Calculus III OR General Elective <i>(if all MATH requirements completed at NOVA)</i>	Major

B.S. COMPUTER SCIENCE
DEGREE TOTAL 120-126

Denotes a course that must be taken at George Mason University. Please see your Success Coach to enroll.

*Students who do not demonstrate ability to bypass CSC 200 should take it within the first two semesters.

**12 credits of Natural Science must include a two-course sequence in the same subject.

***If students opt to take CSC 110 as a co-enrollment course, students should take this course in their last semester at NOVA.

****For Computer Science Electives, please visit - <https://catalog.gmu.edu/colleges-schools/engineering/computer-science/computer-science-bs/#requirementstext>

For academic policies and procedures, please see Mason catalog - <https://catalog.gmu.edu/policies/>

Students seeking a bachelor's degree must apply at least 45 credits of upper-level courses (numbered 300 or above) toward graduation requirements. This cannot include transferred credits with an L-designation (e.g. ECE-L301). All B.S. degrees at Mason require a minimum of 120 credits; see your Mason advisor for advice on what courses to take if needed.