

A.S. Information Technology / B.S. Information Technology Pathway 2020-2021

A.S. Information Technology

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 complete at least six degree-applicable credits with a C or better each fall and spring semester.
- 6. Students must earn a 3.0 cumulative GPA to matriculate to Mason.
- 7. While not required to matriculate to Mason, in the following courses, students must earn a B or higher to receive the equivalent Mason credit: ITP 120 or ITP 150, ITE 170, and ITD 256.
- 8. Students must have a minimum 2.85 GPA upon matriculation to Mason. Please note this program GPA requirement is higher than the ADVANCE program requirement indicated in milestone #2 above.

	NOVA DEGREE			MASON	MASON
	REQUIREMENT	Credits	Courses	TRANSFER	CORE/DEGREE
	REQUIREIVIENT			EQUIVALENT	EQUIVALENT
1	SDV Course	1	SDV 101 Orientation to Information Technology	UNIV 100	Elective
2	ENG 111	3	ENG 111 College Composition I	ENGH 101	Written Comm
			HIS 101 History of Western Civilization I OR	HIST 101	
3	HIS Course	3	HIS 102 History of Western Civilization II OR	HIST 102	Western Civ
			HIS 112 History of World Civilization II	HIST 125	
4	MTH 161	3	MTH 161 PreCalculus I*	None	Prerequiste
5	ITE 119	3	ITE 119 Information Literacy	IT 104	Major
6	ENG 112	3	ENG 112 College Composition II	ENGH XXX	Elective
_		2	CST 100 Principles of Public Speaking OR	COMM 100	Oral Comm
7	CST 100 or 110	3	CST 110 Introduction to Communication	COMM 101	
			ART 100 Art Appreciation OR	ARTH 101	Arts
			ART 101 History and Appreciation of Art I OR	ARTH 200	
8	Humanities/Fine Arts #1	3	ART 102 History and Appreciation of Art II OR	ARTH 201	
•	Humanities/Fine Arts #1	3	CST 130 Introduction to Theatre OR	THR 101	
			CST 151 Film Appreciation I OR	ENGH L372	
			MUS 121 Music Appreciation I	MUSI 101	
9	MTH 261	3	MTH 261 Applied Calculus I	MATH 108	Major
10	Technical Elective #1	3	ITE 170 Multimedia Software	IT 213	Major
	Social/Behavioral Sciences #1	3	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	GGS 103	
			HIS 121 United States History I OR	HIST 121	
			HIS 122 United States History II OR	HIST 122	
11			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	
			PSY 230 Developmental Psychology OR	PSYC 211	
			SOC 200 Principles of Sociology OR	SOCI 101	
			SOC 211 Principles of Anthropology I	ANTH 114	
	Programming Elective		ITP 120 Java Programming I OR	IT 106	Major
12		4	ITP 150 Python Programming	IT 109	

		BIO 101 General Biology I OR	BIOL 103	
Science Course #1	4	CHM 101 Introductory Chemistry I OR	CHEM 103	Nat Science
		ENV 121 General Environmental Science I OR	EVPP 110	
		GOL 105 Physical Geology OR	GEOL 101	
		PHY 101 Introduction to Physics I	PHYS 103	
Technical Elective #2	3	ITD 256 Advanced Database Management	IT 214	Major
Humanities/Fine Arts #2		ENG 236 Introduction to the Short Story OR		Literature
	3	ENG 241 Survey of American Literature I OR		
		ENG 242 Survey of American Literature II OR	ENGH 202	
		ENG 251 Survey of World Literature I OR		
		ENG 252 Survey of World Literature II OR		
		ENG 253 Survey of African-American Literature I		
Technical Elective #3	3	IT 102 Discrete Structures	IT 102	Major
Social/Behavioral Sciences #2	3	GEO 220 World Regional Geography OR	GGS 101	Global
		HIS 111 History of World Civilization I OR	HIST L387	
		PLS 140 Introduction to Comp Govt OR	GOVT 133	
		PLS 241 International Relations I OR	GOVT 132	
		PSY 219 Cross-Cultural Psychology OR	PSYC L379	
		SSC 115 Introduction to Global Affairs	GLOA 101	
Science Course #2	4	BIO 102 General Biology II OR	BIOL 106/107	Nat Science
		CHM 102 Introductory Chemistry II OR	CHEM 104	
		ENV 122 General Environmental Science II OR	EVPP 111	
		GOL 106 Historical Geology OR	GEOL 102	
		PHY 102 Introduction to Physics II	PHYS 104	
Technical Elective #4	3	ITN 100 Introduction to Telecommunications	see #20	
Technical Elective #5	3	ITE 221 PC Hardware and OS Architecture	IT 105 and IT XXX**	Major & Electiv

A.S. INFORMATION
TECHNOLOGY DEGREE TOTAL

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

B.S. Information Technology

61

Concentrations: Cyber Security, Database Technology and Programming, Health Information Technology, Network and Telecommunications, Web Development

	MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE EQUIVALENT	
21	Gen Ed: Written Communication (UL)	3	ENGH 302 Advanced Composition	Written Comm	
22	IT Foundation Course	3	IT 206 Object Oriented Techniques for IT Problem Solving OR IT 209 Introduction to Object Oriented Programming	Major	
23	IT Foundation Course	3	IT 216 Systems Analysis and Design	Major	
24	IT Foundation Course	3	STAT 250 Introductory Statistics I	Major	
25	IT Core Course	3	IT 207 Applied IT Programming	Major	
26	IT Core Course	3	IT 223 Information Security Fundamentals	Major	
27	IT Core Course	3	IT 300 Modern Telecommunications	Major	
28	IT Core Course	3	IT 304 IT in the Global Economy	Major	
29	IT Core Course	3	IT 341 Data Communications and Network Principles	Major	
30	IT Core Course	3	IT 342 Operating Systems Fundamentals	Major	
31	IT Core Course	3	IT 343 IT Project Management	Major	
32	IT Core Course	3	MBUS 300 Accounting in a Global Economy	Major	
33	IT Core Course	3	SYST 469 Human Computer Interaction	Major	
34	Gen Ed: Capstone/Synthesis	3	IT 492 Senior Design Project I	Synthesis	
35	Gen Ed: Capstone/Synthesis	4	IT 493 Senior Design Project II	Synthesis	

36	Other Major Requirements	1	IT 293 Applied IT: Junior Transition	Major
37	IT Concentration Course #1	3	Approved Concentration Course***	Major
38	IT Concentration Course #2	3	Approved Concentration Course***	Major
39	IT Concentration Course #3	3	Approved Concentration Course***	Major
40	IT Concentration Course #4	3	Approved Concentration Course***	Major
41	IT Concentration Course #5	3	Approved Concentration Course***	Major

B.S. INFORMATION

TECHNOLOGY DEGREE TOTAL

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

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

- *Students should select MTH 245 if MTH 161 is not needed. MTH 161 does not transfer to Mason.
- **Students must take ITN 100 and ITE 221 in order to receive credit for IT 105.

120-123

***For approved concentration courses, please visit: https://catalog.gmu.edu/colleges-schools/engineering/information-sciences-technology/information-technology-bs/#requirementstext

Students seeking a bachelor's degree must apply at least 45 credits of upper-level courses (numbered 300 or above) toward graduation requirements.