

ADVANCE

A NOVA | MASON PARTNERSHIP

A.S. Information Technology /
B.S. Information Technology Pathway
2021-2022

A.S. Information Technology

ADVANCE Program Milestones

ADVANCE Milestone Requirements: All ADVANCE students must adhere to the following requirements. For Milestones #1-#3, failure to meet these milestones will prevent a student from matriculating to Mason and/or result in termination from ADVANCE. For Milestones #4-#6, failure to meet these milestones may delay matriculation to Mason.

1. Students must complete their NOVA degree within 4 years of being admitted into ADVANCE. Students are highly encouraged to be continuously enrolled at NOVA/Mason to support progress towards degree completion.
2. Students must maintain a minimum 2.5 cumulative GPA at NOVA and must have a minimum 2.5 GPA upon matriculation to Mason.
3. Students who wish to enroll at Mason for the fall semester must apply for NOVA graduation by March 1 for spring graduation or June 1 for summer graduation. Students who wish to enroll at Mason for the spring semester must apply for NOVA graduation by October 1 for winter graduation.
4. Students must begin developmental coursework in no later than the first semester in ADVANCE at NOVA.
5. Students must take first college-level MTH course and ENG 111 in the semester immediately following the completion of any MDE or EDE courses (excluding summer).
6. 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.

ADVANCE Program-Specific Requirements:

1. Students must earn a B or higher in ITN 100, ITE 221, ITP 120 or ITP 150, ITE 170, and ITD 256.
2. Students must have a minimum 3.0 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 REQUIREMENT	Credits	Courses	MASON TRANSFER EQUIVALENT	MASON CORE/DEGREE EQUIVALENT
1	SDV Course	1	SDV 100 College Success Skills OR SDV 101 Orientation to Information Technology	UNIV 100	General Elective
2	ENG 111	3	ENG 111 College Composition I	ENGH 101	Written Comm
3	HIS Course	3	HIS 101 History of Western Civilization I OR HIS 102 History of Western Civilization II OR HIS 112 History of World Civilization II	HIST 101 HIST 102 HIST 125	Western Civ
4	ITE 119	3	ITE 119 Information Literacy	IT 104	Major
5	MTH 161	3	MTH 161 PreCalculus I ¹	None	Prerequisite
6	Social/Behavioral Sciences #1	3	ECO 201 Principles of Macroeconomics OR ECO 202 Principles of Microeconomics OR GEO 210 Introduction to Cultural Geography OR HIS 121 United States History I OR HIS 122 United States History II OR PLS 135 American National Politics OR PSY 200 Principles of Psychology OR PSY 230 Developmental Psychology OR SOC 200 Principles of Sociology OR SOC 211 Principles of Anthropology I	ECON 104 ECON 103 GGS 103 HIST 121 HIST 122 GOVT 103 PSYC 100 PSYC 211 SOCI 101 ANTH 114	Soc/Behav
7	ENG 112	3	ENG 112 College Composition II	ENGH XXX	General Elective
8	MTH 261	3	MTH 261 Applied Calculus I	MATH 108	Major
9	Technical Elective #1	3	ITE 170 Multimedia Software	IT 213	Major
10	Technical Elective #2	3	ITD 256 Advanced Database Management	IT 214	Major
11	Technical Elective #3	3	IT 102 Discrete Structures	IT 102	Major
12	CST 110	3	CST 100 Principles of Public Speaking OR CST 110 Introduction to Communication	COMM 100 COMM 101	Oral Comm
13	Programming Elective	4	ITP 120 Java Programming I OR ITP 150 Python Programming	IT 106 IT 109	Major

14	Humanities/Fine Arts #1	3	ART 100 Art Appreciation OR ART 101 History and Appreciation of Art I OR ART 102 History and Appreciation of Art II OR CST 130 Introduction to Theatre OR CST 151 Film Appreciation I OR MUS 121 Music Appreciation I	ARTH 101 ARTH 200 ARTH 201 THR 101 ENGH L372 MUSI 101	Arts
15	Science Course #1	4	BIO 101 General Biology I OR CHM 101 Introductory Chemistry I OR ENV 121 General Environmental Science I OR GOL 105 Physical Geology OR PHY 101 Introduction to Physics I	BIOL 103/105 CHEM 103 EVPP 108/109 GEOL 101 PHYS 103	Nat Science
16	Technical Elective #4	3	ITN 100 Introduction to Telecommunications	see #17	
17	Technical Elective #5	3	ITE 221 PC Hardware and OS Architecture	IT 105 and IT XXX ²	Major & General Elective
18	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
19	Science Course #2	4	BIO 101 General Biology I OR BIO 102 General Biology II OR CHM 101 Introductory Chemistry I OR ENV 121 General Environmental Science I OR ENV 122 General Environmental Science II OR GOL 105 Physical Geology OR GOL 106 Historical Geology OR PHY 101 Introduction to Physics I OR PHY 102 Introduction to Physics II	BIOL 103/105 BIOL 102 CHEM 103 EVPP 108/109 EVPP 112/113 GEOL 101 GEOL 102/104 PHYS 103 PHYS 104	Nat Science
20	Social/Behavioral Sciences #2	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 OR SSC 115 Introduction to Global Affairs	GGG 101 HIST L387 GOVT 133 GOVT 132 PSYC L379 GLOA 101	Global

A.S. INFORMATION
TECHNOLOGY DEGREE TOTAL **61**

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

B.S. Information Technology

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 (Upper Level)	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 ³	Major
38	IT Concentration Course #2	3	Approved Concentration Course ³	Major
39	IT Concentration Course #3	3	Approved Concentration Course ³	Major
40	IT Concentration Course #4	3	Approved Concentration Course ³	Major
41	IT Concentration Course #5	3	Approved Concentration Course ³	Major

B.S. INFORMATION TECHNOLOGY DEGREE TOTAL 120-123

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

Important Academic Information:

¹Students should select MTH 245 if MTH 161 is not needed. MTH 161 does not transfer to Mason.

²Students must take ITN 100 and ITE 221 in order to receive credit for IT 105.

³For approved concentration courses, please visit: <https://catalog.gmu.edu/colleges-schools/engineering/information-sciences-technology/information-technology-bs/#requirementstext>

Additional General Notes & Resources:

- ADVANCE students who earn at least a 2.85 cumulative GPA and no more than 9 credits of unrepeatd D/F grades may be eligible to receive a waiver for any lower-level Mason Core courses not already completed. To be eligible for the core waiver, students must also complete the requirements of the AA or AS degree listed on their pathway, and apply to graduate from NOVA by the deadline (see milestone #3). Students must meet these criteria by the time of matriculation to Mason and provide the Office of Admissions a final, official transcript reflecting the degree conferral date.
- 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.