

ADVANCE

A NOVA | MASON PARTNERSHIP

A.S. Information Technology /
B.S. Information Technology Pathway
Online Option Available
2025-2026

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-#7, failure to meet these milestones may delay matriculation to Mason.

1. Students must graduate with the NOVA degree aligned with their ADVANCE academic pathway 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 spring graduation by March 1 or summer graduation by June 1. Students who wish to enroll at Mason for the spring semester must apply for NOVA fall graduation by October 1.
4. Students must begin developmental coursework 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 complete ENG 111 and ENG 112 with a C or better.
7. Students must complete a college level math course with a C or better no later than one semester before NOVA graduation. Refer to your pathway to select the appropriate MTH course(s).

ADVANCE Program-Specific Requirements:

1. 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.
2. 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.
3. Students must complete a Mason Core Quantitative Reasoning or Precalculus equivalent with a C or higher to be admitted to the IT, BS major. Options include: MTH 154, MTH 167, MTH 245, MTH 261, or MTH 263. MTH 261 is recommended as it is required in the NOVA IT, AS degree and fulfills the IT, BS math requirement, as indicated on the pathway below.

	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 ¹	ENGH XXX	General Elective
3	HIS Course	3	HIS 101 Western Civilizations Pre-1600 CE OR HIS 102 Western Civilizations Post-1600 CE OR HIS 112 World Civilizations Post-1500 CE (<i>recommended</i>)	HIST 101T HIST 102T HIST 125	Global History
4	ITE 152	3	ITE 152 Introduction to Digital and Information Literacy and Computer Applications	IT 104	Major & Info Tech
5	MTH 161	3	MTH 161 PreCalculus I ²	MATH 103T	General Elective
6	Social/Behavioral Sciences #1	3	ECO 201 Principles of Macroeconomics OR ECO 202 Principles of Microeconomics OR GEO 210 People and the Land: An Introduction to Cultural Geography OR HIS 121 United States History to 1877 OR HIS 122 United States History Since 1865 OR PLS 135 U.S. Government and Politics OR PSY 200 Principles of Psychology OR PSY 230 Developmental Psychology OR SOC 200 Introduction to Sociology OR SOC 211 Cultural Anthropology	ECON 104 ECON 103 GGG 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 ¹	ENGH 101	Written Comm
8	MTH 261	3	MTH 261 Applied Calculus I	MATH 108	Major & Quantitative
9	Technical Elective #1	3	ITE 170 Multimedia Software ³	IT 213	Major
10	Technical Elective #2	3	ITD 256 Advanced Database Management ³	IT 214	Major

11	Technical Elective #3	3	IT 102 Discrete Structures OR MATH 125 Discrete Mathematics	IT 102 MATH 125	Major
12	CST Course	3	CST 100 Principles of Public Speaking OR CST 110 Introduction to Human Communication	COMM 100 COMM 101	Major & Oral Comm
13	Programming Elective	4	ITP 120 Java Programming I ³ OR ITP 150 Python Programming ³	IT 106 IT 109	Major
14	Humanities/Fine Arts #1	3	ART 100 Art Appreciation OR ART 101 History of Art: Prehistoric to Gothic OR ART 102 History of Art: Renaissance to Modern OR CST 130 Introduction to Theatre OR CST 151 Film Appreciation I OR MUS 121 Music in Society	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 OR ENV 121 Foundations of Environmental Science OR GOL 105 Physical Geology OR GOL 111 Oceanography I OR PHY 100 Elements of Physics	BIOL 103/105 CHEM 103 EVPP 108/109 GEOL 101/103 GEOL 121/122 PHYS 103	Major & Nat Science
16	Technical Elective #4	3	ITN 100 Introduction to Telecommunications	see ITE 221	Major
17	Technical Elective #5	3	ITE 221 PC Hardware and OS Architecture ⁴	IT 105 and IT XXX	Major & General Elective
18	Humanities/Fine Arts #2	3	ENG 225 Reading Literature: Culture and Ideas OR ENG 245 British Literature OR ENG 246 American Literature OR ENG 255 World Literature OR ENG 258 African American Literature OR ENG 275 Women in Literature OR Any 200-Level ENG Literature course ⁵	ENGH 202 or FRLN L330 (ENG 255 only)	Literature
19	Science Course #2	4	BIO 101 General Biology I OR BIO 102 General Biology II OR CHM 101 Introductory Chemistry OR ENV 121 Foundations of Environmental Science OR ENV 122 Applications in Environmental Science GOL 105 Physical Geology OR GOL 106 Historical Geology OR GOL 111 Oceanography I PHY 100 Elements of Physics	BIOL 103/105 BIOL 102 CHEM 103 EVPP 108/109 EVPP 112/113 GEOL 101/103 GEOL 102/104 GEOL 120/121 PHYS 103	Major & Nat Science
20	Social/Behavioral Sciences #2	3	GEO 220 World Regional Geography OR PLS 140 Introduction to Comparative Politics OR PLS 241 Introduction to International Relations OR PSY 219 Cross-Cultural Psychology OR SSC 115 Introduction to Global Affairs	GGG 101 GOVT 133 GOVT 132 PSYC L379 GLOA 101	General Elective

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, Software Solutions, Computing Platforms and Infrastructure, AI Driven Solutions

	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	Major Capstone & Gen Ed: Apex	3	IT 492 Senior Design Project I	Apex
35	Major Capstone & Gen Ed: Apex	4	IT 493 Senior Design Project II	Apex
36	Other Major Requirements	1	IT 293 Applied IT: Junior Transition	Major
37	IT Concentration Course #1	3	Approved Concentration Course ⁶	Major
38	IT Concentration Course #2	3	Approved Concentration Course ⁶	Major
39	IT Concentration Course #3	3	Approved Concentration Course ⁶	Major
40	IT Concentration Course #4	3	Approved Concentration Course ⁶	Major
41	IT Concentration Course #5	3	Approved Concentration Course ⁶	Major

B.S. INFORMATION

TECHNOLOGY DEGREE TOTAL 123

Denotes a course that must be taken at George Mason University while attending NOVA. Failure to complete your co-enrollment course(s) while attending NOVA can significantly affect your timeline for Mason graduation. Please see your ADVANCE Coach for more information and to enroll.

Please note: Some fully online courses may require a campus presence for orientations, tests, final exams, or labs.

Important Academic Information:

¹Students who complete ENG 111 after Spring 2024 will earn ENGH elective for ENG 111 and ENGH 101 for ENG 112.

²Students should select MTH 245 if MTH 161 is not needed.

³To earn the direct Mason equivalent IT course, students must earn an A or B in the NOVA course. Students with final grades of C or below can repeat the NOVA course or take the course at Mason after matriculation. Completing the course at Mason may affect students' Mason graduation timeline. Students earning a B or higher in the NOVA course are awarded IT --- initially and should contact an IT advisor for the appropriate substitutions.

⁴Students must take ITN 100 and ITE 221 in order to receive credit for IT 105.

⁵200-level ENG literature classes include: ENG 225, ENG 230, ENG 236, ENG 237, ENG 245, ENG 246, ENG 250, ENG 255, ENG 256, ENG 257, ENG 258, ENG 271, ENG 275, and ENG 279.

⁶For approved concentration courses, please visit: <https://catalog.gmu.edu/colleges-schools/engineering-computing/school-computing/information-sciences-technology/information-technology-bs/#requirements-text>

General Education Waiver Policy and Guidance:

- Students who complete a VCCS transfer associate degree (AS, AA, or AFA) will receive a waiver of the Foundation and Exploration (lower division) Mason Core general education categories, which can be found here: <https://catalog.gmu.edu/mason-core/>. To be eligible for the waiver, the students must provide the Mason Office of Admissions with a final, official transcript reflecting the degree conferral date. As a prerequisite for ENGH 302, ENGH 101 is not waived. Students must complete ENGH 100 or ENGH 101, or an equivalent, with a C or higher.
- When a course fulfills a Mason Core requirement **and** a major or college requirement (e.g. Major & Quant), students must complete the course listed on the pathway to fulfill the major/college requirement. Courses that fulfill only Mason Core Foundation and Exploration categories are recommendations. In most pathways, ADVANCE students must complete a Quantitative Reasoning course to matriculate through ADVANCE.
- ADVANCE students must complete the associate degree indicated on their pathway (see the ADVANCE Program Milestones listed above). Students who withdraw from ADVANCE and transfer without the associate degree or UCGS are required to complete each Mason Core general education category.

Additional General Notes & Resources:

- 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.