

A.A.S. Cybersecurity /
B.A.S. Applied Science - Cyber Security
Concentration Pathway
Online Option Available

2025-2026

A.A.S. Cybersecurity

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:

If English is not your first language or you have completed ESL coursework, you must complete ENG 111 and ENG 112 prior to matriculating to George Mason University to meet the English Language Proficiency requirement. Please reach out to ADVANCE Admissions early if you have any questions about this requirement: advance@gmu.edu.

Students who are interested in advanced study are encouraged to contact graduate programs early to determine if the BAS program fits their requirements. To explore possible Bachelor's to Accelerated Master's (BAM) program options from the BAS degree at Mason, visit: https://bas.gmu.edu/academics/bam/.

| | NOVA DEGREE REQUIREMENT | Credits | Courses | MASON TRANSFER EQUIVALENT | MASON CORE/DEGREE EQUIVALENT |
|----|---|---------|--|---------------------------------|------------------------------------|
| 1 | SDV 101 | 1 | SDV 100 College Success Skills 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 | ITE 152 | 3 | ITE 152 Introduction to Digital and Information Literacy and Computer Applications | IT 104 | Major & Info Tech |
| 4 | ITN 100 Required (NOVA Catalog: ITN 100 or ITN 101) | 3 | ITN 100 Intro to Telecommunications ² | See ITE 221 | General Elective |
| 5 | ITN 106 | 3 | ITN 106 Microcomputer Operating Systems | BAS XXX | Major |
| 6 | Approved Elective | 3 | ENG 112 College Composition II ¹ | ENGH 101 | Written Comm |
| 7 | MTH 154 or MTH 155 | 3 | MTH 154 Quantitative Reasoning OR MTH 155 Statistical Reasoning | MATH 106 STAT 105T | Quantitative |
| 8 | ITP 100 | 3 | ITP 100 Software Design | IT XXX | Major |
| 9 | ITE 221 | 3 | ITE 221 PC Hardware and OS Architecture ² | IT 105 & IT XXX | Major |
| 10 | ITN 170 or ITN 171 | 3 | ITN 170 Linux System Administration OR ITN 171 Unix I | BAS XXX | Major |
| 11 | ITN 260 | 3 | ITN 260 Network Security Basics ² | See ITN 266 | General Elective |
| 12 | ITN 261 | 4 | ITN 261 Network Attacks, Computer Crime and Hacking | BAS XXX | Major |

| 3 4 4 3 3 | ITN 200 Administration of Network Resources ITN 262 Network Communication, Security and Authentication ITN 263 Internet/Intranet Firewall and E-Commerce Security ITN 266 Network Security Layers ² CST 100 Principles of Public Speaking OR CST 110 Introduction to Human Communication | BAS XXX BAS XXX BAS XXX IT 223 & IT XXX COMM 100 COMM 101 | Major Major Major Major Oral Comm |
|-----------------------|---|---|---|
| 4 | ITN 263 Internet/Intranet Firewall and E-Commerce Security ITN 266 Network Security Layers ² CST 100 Principles of Public Speaking OR | BAS XXX IT 223 & IT XXX COMM 100 | Major Major |
| 3 | ITN 266 Network Security Layers ² CST 100 Principles of Public Speaking OR | IT 223 & IT XXX COMM 100 | Major |
| | CST 100 Principles of Public Speaking OR | COMM 100 | • |
| 3 | | | Oral Comm |
| | | COMMINITOT | |
| 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 |
| 3 | ITN 276 Computer Forensics I | BAS XXX | Major |
| 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 |
| | | 3 ITN 276 Computer Forensics I HIS 101 Western Civilizations Pre-1600 CE OR | 3 ITN 276 Computer Forensics I BAS XXX HIS 101 Western Civilizations Pre-1600 CE OR HIST 101T 3 HIS 102 Western Civilizations Post-1600 CE OR HIST 102T |

DEGREE TOTAL

65

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

| В., | B.A.S. Applied Science - Cyber Security Concentration | | | | | |
|-----|---|---------|---|------------------------------------|--|--|
| | MASON DEGREE REQUIREMENT | Credits | Course | MASON CORE/DEGREE EQUIVALENT | | |
| 22 | Gen Ed: Written Communication (LL) | 0-3 | ENGH 101 Composition ¹ (if ENG 112 is not completed at NOVA) | Written Comm | | |
| 23 | Concentration Requirements | 3 | IT 304 IT in the Global Economy | Major | | |
| 24 | Concentration Requirements | 3 | IT 357 Computer Crime, Forensics, and Auditing | Major | | |
| 25 | Core Requirements | 3 | BAS 300 Building Professional Competencies | Major | | |
| 26 | Gen Ed: Literature | 3 | Approved Literature Course ³ | Literature | | |
| 27 | Gen Ed: Natural Science (Lab) | 4 | Approved Natural Science with Lab ³ | Nat Science | | |
| 28 | Concentration Requirements | 3 | IT 429 Security Accreditation of Info Systems | Major | | |
| 29 | Gen Ed: Written Communication (UL) | 3 | ENGH 302 Advanced Composition | Written Comm | | |
| 30 | Technical Focus Courses | 3 | Technical Focus Course - Upper-level ⁴ | Major | | |
| 31 | Technical Focus Courses | 3 | Technical Focus Course - Upper-level ⁴ | Major | | |
| 32 | Gen Ed: Natural Science (Non- Lab) | 3 | Approved Natural Science without Lab ³ | Nat Science | | |
| 33 | Concentration Requirements | 3 | IT 481 Cloud Security | Major | | |
| 34 | Concentration Requirements | 3 | IT 343 Project Management | Writing Intensive | | |
| 35 | Technical Focus Courses | 3 | Technical Focus Course - Upper-level ⁴ | Major | | |

| 36 | Gen Ed: Social Science | 3 | Approved Social and Behavioral Science Course ³ | Soc/Behav |
|-----------------------------------|-------------------------|---|---|-----------------|
| 37 | Core Requirements | 3 | BAS 490 Introduction to Research Methods ⁵ OR BAS 492 Capstone Development ⁵ | Major |
| 38 | Technical Focus Courses | 3 | Technical Focus Course - Upper-level ⁴ | Major |
| 39 | Technical Focus Courses | 3 | Technical Focus Course - Upper-level ⁴ | Major |
| 40 | Gen Ed: Global Contexts | 3 | Approved Global Contexts Course ³ | Global Contexts |
| 41 | Core Requirements/Apex | 3 | BAS 491 Applied Sciences Capstone ⁵ OR BAS 493 BAS Capstone ⁵ | Apex |
| B.A.S. APPLIED SCIENCE 123 - 126 | | | | |

DEGREE TOTAL

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 --- for ENG 111 and ENGH 101 for ENG 112. Students should use the "Approved Elective" to complete ENG 112. Students who take an IT elective instead of ENG 112 can still matriculate to the BAS program at Mason, but will be required to take ENGH 101 in their first semester at Mason, which adds credit to the BAS degree total.

²Students must take ITN 100 and ITE 221 in order to receive credit for IT 105. Students must take ITN 260 and ITN 266 in order to receive credit for IT 223.

³For approved Mason Core courses, please visit - https://catalog.gmu.edu/mason-core/.

⁴For approved Technical Focus courses, please visit: https://catalog.gmu.edu/colleges-schools/interdisciplinary-programs-courses/applied-sciencebas/#requirementstext

 5 Students must select either BAS 490 and BAS 491 or BAS 492 and BAS 493.

Additional General Notes & Resources:

- For more information about Accelerated Master's program options, visit: https://catalog.gmu.edu/colleges-schools/interdisciplinary-programscourses/applied-science-bas/#acceleratedmasterstext. Students interested in an Accelerated Master's should consult their Mason academic advisor in their first term after matriculation regarding program benefits, admission criteria, and application process.
- Students must have a C or better in any course that satisfies a prerequisite for an IT course. To graduate with the BAS with a Cyber Security concentration, students must have a C or better in their major core, concentration, and technical focus courses.
- If English is not your first language or you have completed ESL coursework, you must complete ENG 111 and ENG 112 prior to matriculating to George Mason University to meet the English Language Proficiency requirement.
- 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.