

# ADVANCE

A NOVA | MASON PARTNERSHIP

A.A.S. Cybersecurity /  
B.A.S. Applied Science - Cyber Security  
Concentration Pathway  
Online Option Available  
**2024-2025**

## 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 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 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 Mason Core Quantitative Reasoning course equivalent 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](mailto:advance@gmu.edu).

BAS degrees are designed for adult learners who have some work experience in their field of choice, but the degree is open to students of all ages. Further, BAS degrees are often considered terminal degrees (i.e., they may not lead to advanced study in master's degree or doctoral programs). Students who are interested in advanced study are encouraged to contact graduate programs early to determine if the BAS program fits their requirements.

	NOVA DEGREE REQUIREMENT	Credits	Courses	MASON TRANSFER EQUIVALENT	MASON CORE/DEGREE EQUIVALENT
1	SDV 101	1	SDV 101 Orientation to Information Technology	UNIV 100	General Elective
2	ENG 111	3	ENG 111 College Composition I <sup>1</sup>	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	3	ITN 100 Intro to Telecommunications <sup>2</sup>	See ITE 221	General Elective
5	ITN 106	3	ITN 106 Microcomputer Operating Systems	BAS XXX	Major
6	MTH 154	3	MTH 154 Quantitative Reasoning	MATH 106	Quantitative
7	Approved Elective	3	ENG 112 College Composition II <sup>1</sup>	ENGH 101	Written Comm
8	ITP 100	3	ITP 100 Software Design	IT XXX	Major
9	ITE 221	3	ITE 221 PC Hardware and OS Architecture <sup>2</sup>	IT 105 & IT XXX	Major
10	ITN 170 or ITN 171	3	ITN 170 Linux System Administration <b>OR</b> ITN 171 Unix I	BAS XXX	Major
11	ITN 260	3	ITN 260 Network Security Basics <sup>2</sup>	See ITN 266	General Elective
12	ITN 261	4	ITN 261 Network Attacks, Computer Crime and Hacking	BAS XXX	Major
13	ITP Programming Elective	4	ITP 120 Java Programming I <b>OR</b> ITP 132 C++ Programming I <b>OR</b> ITP 150 Python Programing <b>OR</b> ITP 160 Introduction to Game Design & Development <b>OR</b> ITP 225 Web Scripting Languages <b>OR</b> ITP 270 Programming for Cybersecurity	IT XXX or GAME 210	Major
14	ITN 200	3	ITN 200 Administration of Network Resources	BAS XXX	Major

15	ITN 262	4	ITN 262 Network Communication, Security and Authentication	BAS XXX	Major
16	ITN 263	4	ITN 263 Internet/Intranet Firewall and E-Commerce Security	BAS XXX	Major
17	ITN 266	3	ITN 266 Network Security Layers <sup>2</sup>	IT 223 & IT XXX	Major
18	CST Course	3	CST 100 Principles of Public Speaking <b>OR</b> CST 110 Introduction to Human Communication	COMM 100 COMM 101	Oral Comm
19	Humanities/Fine Arts	3	ART 100 Art Appreciation <b>OR</b> ART 101 History of Art: Prehistoric to Gothic <b>OR</b> ART 102 History of Art: Renaissance to Modern <b>OR</b> CST 130 Introduction to Theatre <b>OR</b> CST 151 Film Appreciation I <b>OR</b> MUS 121 Music in Society	ARTH 101 ARTH 200 ARTH 201 THR 101 ENGH L372 MUSI 101	Arts
20	ITN 276	3	ITN 276 Computer Forensics I	BAS XXX	Major
21	Social/Behavioral Sciences	3	HIS 101 Western Civilizations Pre-1600 CE <b>OR</b> HIS 102 Western Civilizations Post-1600 CE <b>OR</b> HIS 112 World Civilizations Post-1500 CE ( <i>recommended</i> ) <sup>2</sup>	HIST 101T HIST 102T HIST 125	Global History

**A.A.S. CYBERSECURITY  
DEGREE TOTAL**

**65**

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

**B.A.S. Applied Science - Cyber Security Concentration**

	MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE EQUIVALENT
22	Concentration Requirements	3	IT 304 IT in the Global Economy	Major
23	Concentration Requirements	3	IT 357 Computer Crime, Forensics, and Auditing	Major
24	Core Requirements	3	BAS 300 Building Professional Competencies	Major
25	Gen Ed: Literature	3	Approved Literature Course <sup>3</sup>	Literature
26	Gen Ed: Natural Science (Lab)	4	Approved Natural Science with Lab <sup>3</sup>	Nat Science
27	Concentration Requirements	3	IT 429 Security Accreditation of Info Systems	Major
28	Gen Ed: Written Communication (UL)	3	ENGH 302 Advanced Composition	Written Comm
29	Technical Focus Courses	3	Technical Focus Course - Upper-level <sup>4</sup>	Major
30	Technical Focus Courses	3	Technical Focus Course - Upper-level <sup>4</sup>	Major
31	Gen Ed: Natural Science (Non- Lab)	3	Approved Natural Science without Lab <sup>3</sup>	Nat Science
32	Concentration Requirements	3	IT 481 Cloud Security	Major
33	Concentration Requirements	3	IT 343 Project Management	Writing Intensive
34	Technical Focus Courses	3	Technical Focus Course - Upper-level <sup>4</sup>	Major
35	Gen Ed: Social Science	3	Approved Social and Behavioral Science Course <sup>3</sup>	Soc/Behav
36	Core Requirements	3	BAS 490 Introduction to Research Methods <sup>5</sup> <b>OR</b> BAS 492 Capstone Development <sup>5</sup>	Major
37	Technical Focus Courses	3	Technical Focus Course - Upper-level <sup>4</sup>	Major
38	Technical Focus Courses	3	Technical Focus Course - Upper-level <sup>4</sup>	Major
39	Gen Ed: Global Contexts	3	Approved Global Contexts Course <sup>3</sup>	Global Contexts
40	Core Requirements/Apex	3	BAS 491 Applied Sciences Capstone <sup>5</sup> <b>OR</b> BAS 493 BAS Capstone <sup>5</sup>	Apex

**B.A.S. APPLIED SCIENCE  
DEGREE TOTAL**

**123**

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

**Important Academic Information:**

<sup>1</sup>Students 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. If students matriculate without an ENGH 101 equivalent complete with a C or higher, ENGH 101 will be required in the first semester at Mason.

<sup>2</sup>Students 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.

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

<sup>4</sup>For approved Technical Focus courses, please visit: <https://catalog.gmu.edu/colleges-schools/interdisciplinary-programs-courses/applied-science-bas/#requirements-text>

<sup>5</sup>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-programs-courses/applied-science-bas/#accelerated-master-text>. 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.