

A.A.S Information Systems Technology/ B.A.S. Data Analytics Pathway **2021-2022**

A.A.S. Information Systems Technology

ADVANCE Program Milestones

<u>ADVANCE Milestone Requirements:</u> 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 <u>highly encouraged</u> 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 with a C or better.
 - b. Complete the first college-level MTH course with a C or better.

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 to meet the English Language Proficiency requirement.

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	MASON CORE/DEGREE
1	SDV 101	1	SDV 100 College Success Skills OR SDV 101 Orientation to Information Technology	UNIV 100	EQUIVALENT General Elective
2	ENG 111	3	ENG 111 College Composition I	ENGH 101	Written Comm
3	ITD 110	3	ITD 110 Web Design I	BAS XXX	Elective
4	ITE 115 or ITE 119	3	ITE 115 Intro to Computer Applications and Concepts OR ITE 119 Information Literacy	IT 103 IT 104	Info Tech
5	ITN 100	3	ITN 100 Intro to Telecommunications	See #14	General Elective
6	MTH 167 Required (NOVA Catalog: MTH 154 or higher)	5	MTH 167 PreCalculus with Trigonometry ¹	MATH 105	Prerequisite
7	ITE 170	3	ITE 170 Multimedia Software	IT	Major
8	ITN 170	3	ITN 170 Linux System Administration	IT	General Elective
9	ITN 260	3	ITN 260 Network Security Basics ²	See #16	General Elective
10	ITP 100	3	ITP 100 Software Design ²	IT XXX	General Elective
11	IT Elective #1	3	IT Electives ⁴	BAS XXX	General Elective
12	IT Elective #2	3	IT Electives ⁴	BAS XXX	General Elective
13	ITD 256	3	ITD 256 Advanced Database Management	IT	Major
14	ITE 221	3	ITE 221 PC Hardware and OS Architecture ²	IT 105 & IT XXX	Major
15	ITP Programming Elective	4	ITP 150 Python Programming ³	IT 109	Major
16	IT Elective #3	3	ITN 266 Network Security Layers ²	IT 223 & IT XXX	General Elective
17	IT Elective #4	3	IT Electives ⁴	BAS XXX	General Elective

18	CST Course	3	CST 100 Principles of Public Speaking OR	COMM 100	Oral Comm
			CST 110 Introduction to Communication	COMM 101	
19	IT Elective #5	3	IT Electives ⁴	BAS XXX	Major
20	Humanities/Fine Arts	3	ART 100 Art Appreciation OR	ARTH 101	Arts
			ART 101 History and Appreciation of Art I OR	ARTH 200	
			ART 102 History and Appreciation of Art II OR	ARTH 201	
			CST 130 Introduction to Theatre OR	THR 101	
			CST 151 Film Appreciation I OR	ENGH L372	
			MUS 121 Music Appreciation I	MUSI 101	
21	Social/Behavioral Sciences #1	3	HIS 101 History of Western Civilization I OR	HIST 101	Western Civ
			HIS 102 History of Western Civilization II OR	HIST 102	
			HIS 112 History of World Civilization II	HIST 125	
22	Social/Behavioral Sciences #2	3	ECO 201 Principles of Macroeconomics OR	ECON 104	
			GEO 210 Introduction to Cultural Geography OR	GGS 103	Soc/Behav
			HIS 121 United States History I OR	HIST 121	
			PSY 200 Principles of Psychology OR	PSYC 100	
			SOC 200 Principles of Sociology	SOCI 101	
A.A	A.S. INFO. SYSTEMS TECH.	67			
DEGREE TOTAL 67					

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

В.	B.A.S. Applied Science - Data Analytics					
	MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE EQUIVALENT		
23	Concentration Requirements	4	MATH 113 Analytic Geometry and Calculus I (not needed if MTH 263 is completed at NOVA)	Major & Quant		
24	Gen Ed: Literature	3	Approved Upper-level Literature Course ⁵	Literature		
25	Core Requirements	3	BAS 300 Building Professional Competencies	Major		
26	Concentration Requirements	3	STAT 250 Introductory Statistics I	Major		
27	General Electives	3	Upper-level Global Understanding ⁵ (See: Advisor)	Global		
28	Concentration Requirements	3	IT 102 Discrete Structures	Major		
29	Gen Ed: Natural Science (Lab)	4	Approved Natural Science with Lab ⁵	Nat Science		
30	Concentration Requirements	3	IT 343 Project Management	Writing Intensive		
31	Concentration Requirements	3	STAT 350 Introductory Statistics II	Major		
32	Core Requirements	3	BAS 490 Introduction to Research Methods	Major		
33	Gen Ed: Natural Science (Non- Lab)	3	Approved Upper-level Natural Science without Lab ⁵	Nat Science		
34	Concentration Requirements	3	Applied Coursework (Upper-level, See: Advisor)	Major		
35	Concentration Requirements	3	IT 209 Introduction to Object Oriented Programming	Major		
36	Concentration Requirements	3	STAT 362 Introduction to Computer Statistical Packages	Major		
37	Gen Ed: Written Communication (Upper-level)	3	ENGH 302 Advanced Composition	Written Comm		
38	Concentration Requirements	3	STAT 463 Introduction to Exploratory Data Analysis	Major		
39	Concentration Requirements	3	Applied Coursework (Upper-level, See: Advisor)	Major		
40	Concentration Requirements	3	Applied Coursework (Upper-level, See: Advisor)	Major		
41	Concentration Requirements	3	IT 309 Data Structures and Algorithms in Python	Major		
42	Core Requirements/Synthesis	3	BAS 491 Applied Sciences Capstone	Synthesis		
	.S. APPLIED SCIENCE GREE TOTAL	129				

Important Academic Information:

¹Students must earn a C or better in MTH 167 (MATH 105) to progress to MATH 113 at Mason. Students who place out of MTH 167 may take MTH 263.

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.

³Students with a conferred AAS degree and a grade of C or better in ITP 150 will be granted a substitution for IT 109. This substitution is available to BAS students only, and will be processed by the BAS advisor upon matriculation to Mason.

⁴IT Electives must be met through any combination of IT courses (ITD, ITE, ITN, ITP) that are not already included in the degree.

⁵For approved Mason Core courses, please visit - https://catalog.gmu.edu/mason-core/

Additional General Notes & Resources:

- 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 Data Analytics concentration, students must have a C or better in their major core, concentration, and applied coursework 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.