ADVANCE
A NOVA | MASON PARTNERSHIP

A.S. Science / B.S. Atmospheric Sciences Pathway
2021-2022

A.S. Science

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.

	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 XXX	UNIV 100	General Elective
2	**ENG 111**	3	ENG 111 College Composition I	ENGH 101	Written Comm
3	**MTH 167 or Science**	4	CHM 111 General Chemistry I	CHEM 211-213	Nat Science
4	**MTH 263**	4	MTH 263 Calculus I	MATH 113	Quantitative
5	**ENG 112**	3	ENG 112 College Composition II	ENGH XXX	General Elective
6	**MTH 264**	4	MTH 264 Calculus II	MATH 114	Major
7	**Science Course #1**	4	CLIM 111/112 Introduction to the Fundamentals of Atmospheric Science + Lab ***(Typically offered in the Fall Semester at Mason)***	CLIM 111-112	Nat Science
8	**ITE 115 or ITE 119 or General Education Elective**	3	CDS 130 Computing For Scientists **(offered online)**	CDS 130	Info Tech
9	**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
10	**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
11	**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

12	**Math or Science #1**	5	PHY 231 General University Physics I	PHYS 160-161-266	Major
13	**Math or Science #2**	4	MTH 265 Calculus III	MATH 213	Major
14	**Social/Behavioral Sciences #2**	3	GEO 220 World Regional Geography **OR** PLS 140 Introduction to Comparative Politics **OR** PLS 241 International Relations I	GGS 101 GOVT 133 GOVT 132	Global
15	**CST Course**	3	CST 100 Principles of Public Speaking **OR** CST 110 Introduction to Communication	COMM 100 COMM 101	Oral Comm
16	**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
17	**Math or Science #3**	3	MTH 245 Statistics I	STAT 250	Major
18	**Science Course #2**	5	PHY 232 General University Physics II	PHYS 260-261-XXX	Major
A.S. SCIENCE DEGREE TOTAL		**61**			

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

B.S. Atmospheric Sciences

Concentrations: Meteorology; Computational Atmospheric Sciences

	MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE EQUIVALENT
19	**Gen Ed: Written Communication (Upper level)**	3	ENGH 302 Advanced Composition	Written Comm
20	**Atmospheric Sciences Core**	4	CLIM 102 Introduction to Global Climate Change Science	Major
21	**Atmospheric Sciences Core**	4	CLIM 301 Weather Analysis and Prediction	Major
22	**Required Elective**	3	Approved Required Elective course[1, 2]	Major
23	**Atmospheric Sciences Core**	3	CLIM 429 Atmospheric Thermodynamics	Major
24	**Options**	3	Approved Options course[2]	Major
25	**Required Elective**	3	Approved Required Elective course[1, 2]	Major
26	**Atmospheric Sciences Core**	3	CLIM 411 Atmospheric Dynamics	Major
27	**Options**	3	Approved Options course[2]	Major
28	**Required Elective**	3	Approved Required Elective course[1, 2]	Major
29	**Options**	3	Approved Options course[2]	Major
30	**General Elective**	3	General Electives (Upper-level See: Advisor)	Major
31	**General Elective**	3	General Electives (Upper-level See: Advisor)	Major
32	**Atmospheric Sciences Core**	3	PHYS 475 Atmospheric Physics	Major
33	**Atmospheric Sciences Core**	3	CLIM 408 Senior Research	Major
34	**General Elective**	3	General Electives (Upper-level See: Advisor)	Major
35	**General Elective**	3	General Electives (Upper-level See: Advisor)	Major
36	**General Elective**	3	General Electives (See: Advisor)	Major
37	**Gen Ed: Synthesis**	3	Approved Synthesis Course[2]	Synthesis
B.S. ATMOSPHERIC SCIENCES DEGREE TOTAL		**120**		

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

Important Academic Information:

[1]Required electives must be independent of courses taken in the selected option (Meteorology or Computational Atmospheric Sciences).

[2]For approved Options and Required Electives and other Required Courses, please visit - https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/atmospheric-sciences-bs/#requirementstext

Additional General Notes & Resources:

- A GPA of at least 2.00 is required for all core courses, with an overall GPA of at least 2.50.
- ADVANCE students who earn at least a 2.85 cumulative GPA and no more than 9 credits of unrepeated 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.