ADVANCE
A NOVA | MASON PARTNERSHIP

A.S. Science / B.S. Atmospheric Sciences Pathway
2022-2023

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-#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).

	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**	5	MTH 167 Precalculus with Trigonometry	MATH 105	General Elective
4	**Science Course #1**	4	CHM 111 General Chemistry I	CHEM 211-213	Nat Science
5	**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 GGS 103 HIST 121 HIST 122 GOVT 103 PSYC 100 PSYC 211 SOCI 101 ANTH 114	Soc/Behav
6	**MTH 263**	4	MTH 263 Calculus I	MATH 113	Quantitative
7	**ENG 112**	3	ENG 112 College Composition II	ENGH XXX	General Elective
8	**Math or Science #1**	4	CLIM 111/112 Introduction to the Fundamentals of Atmospheric Science + Lab ***(Typically offered in the Fall Semester at Mason)***	CLIM 111-112	Major
9	**ITE 152 or General Education Elective**	3	CDS 130 Computing For Scientists **(offered online)**	CDS 130	Info Tech
10	**MTH 264**	4	MTH 264 Calculus II	MATH 114	Major
11	**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	HIST 101 HIST 102 HIST 125	Western Civ
12	**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

13	**Math or Science #2**	4	PHY 241 University Physics I	PHYS 160-161	Nat Science
14	**Math or Science #3**	4	MTH 265 Calculus III	MATH 213	Major
15	**Social/Behavioral Sciences #2**	3	GEO 220 World Regional Geography **OR** PLS 140 Introduction to Comparative Politics **OR** PLS 241 Introduction to International Relations	GGS 101 GOVT 133 GOVT 132	Global
16	**CST Course**	3	CST 100 Principles of Public Speaking **OR** CST 110 Introduction to Human Communication	COMM 100 COMM 101	Oral Comm
17	**General Education Elective** ***(This elective is not needed if selections for all other requirements total 60 credits or more)***	0-3	CST 229 Intercultural Communication **OR** ECO 202 Principles of Microeconomics **OR** HUM 220 Introduction to African-American Studies **OR** HUM 256 Comparative Mythology **OR** PHI 111 Logic I **OR** PSY 200 Principles of Psychology **OR** REL 100 Introduction to the Study of Religion **OR** SOC 200 Introduction to Sociology	COMM L305 ECON 103 AFAM 200 ENGH 202 PHIL 173 PSYC 100 RELI 100 SOCI 101	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's Literature **OR** Any 200-Level ENG Literature course[1]	ENGH 202	Literature
19	**Science Course #2**	4	PHY 242 University Physics II	PHYS 260-261	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
20	**Gen Ed: Written Communication (Upper level)**	3	ENGH 302 Advanced Composition	Written Comm
21	**Statistics**	3	STAT 250 Introductory Statistics I	Major
22	**Atmospheric Sciences Core**	4	CLIM 102 Introduction to Global Climate Change Science	Major
23	**Atmospheric Sciences Core**	4	CLIM 301 Weather Analysis and Prediction	Major
24	**Required Elective**	3	Approved Required Elective course[2, 3]	Major
25	**Atmospheric Sciences Core**	3	CLIM 429 Atmospheric Thermodynamics	Major
26	**Options**	3	Approved Options course[3]	Major
27	**Required Elective**	3	Approved Required Elective course[2, 3]	Major
28	**Atmospheric Sciences Core**	3	CLIM 411 Atmospheric Dynamics	Major
29	**Options**	3	Approved Options course[3]	Major
30	**Required Elective**	3	Approved Required Elective course[2, 3]	Major
31	**Options**	3	Approved Options course[3]	Major
32	**General Elective**	3	General Electives (Upper-level See: Advisor)	Major
33	**General Elective**	3	General Electives (Upper-level See: Advisor)	Major
34	**Atmospheric Sciences Core**	3	PHYS 475 Atmospheric Physics	Major
35	**Atmospheric Sciences Core**	3	CLIM 408 Senior Research	Major
36	**General Elective**	3	General Electives (Upper-level See: Advisor)	Major
37	**General Elective**	3	General Electives (Upper-level See: Advisor)	Major
38	**Gen Ed: Synthesis**	3	Approved Synthesis Course[3]	Synthesis
B.S. ATMOSPHERIC SCIENCES DEGREE TOTAL		**120**		

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.

Important Academic Information:

[1]200-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.

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

[3]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 final, 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 Mason 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 provide the Office of Admissions with a final, official transcript reflecting the degree conferral date and a cumulative NOVA GPA at or above 2.85.
- 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.