

# ADVANCE

A NOVA | MASON PARTNERSHIP

A.S. Science / B.S. Neuroscience 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 <b>OR</b> SDV 101 Orientation to XXX	UNIV 100	General Elective
2	ENG 111	3	ENG 111 College Composition I	ENGH 101	Written Comm
3	BIO 101 Required (NOVA Catalog: ITE 152 or General Education Elective)	4	BIO 101 General Biology I	BIOL 103/105	General Elective
4	MTH 167 or Science	5	MTH 167 Pre-Calculus with Trigonometry	MATH 105	General Elective
5	MTH 263	4	MTH 263 Calculus I	MATH 113	Quantitative
6	ENG 112	3	ENG 112 College Composition II	ENGH XXX	General Elective
7	MTH 245 Required (NOVA Catalog: MTH 264 or MTH 245)	3	MTH 245 Statistics I	STAT 250	Major
8	Science Course #1	4	CHM 111 General Chemistry I	CHEM 211-213	Nat Science
9	Social/Behavioral Sciences #1	3	PSY 200 Principles of Psychology	PSYC 100	Soc/Behav
10	HIS Course	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	HIST 101 HIST 102 HIST 125	Western Civ
11	Humanities/Fine Arts #1	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
12	Math or Science #1	4	PHY 201 General College Physics I	PHYS 243-244	Major
13	Math or Science #2	4	BIO 206 Cell Biology	BIOL 213	Major
14	Social/Behavioral Sciences #2	3	GEO 220 World Regional Geography <b>OR</b> PLS 140 Introduction to Comparative Politics <b>OR</b> PLS 241 Introduction to International Relations	GGG 101 GOVT 133 GOVT 132	Global
15	CST Course	3	CST 100 Principles of Public Speaking <b>OR</b> CST 110 Introduction to Human Communication	COMM 100 COMM 101	Oral Comm

16	Humanities/Fine Arts #2	3	ENG 225 Reading Literature: Culture and Ideas <b>OR</b> ENG 245 British Literature <b>OR</b> ENG 246 American Literature <b>OR</b> ENG 255 World Literature <b>OR</b> ENG 258 African American Literature <b>OR</b> ENG 275 Women's Literature <b>OR</b> Any 200-Level ENG Literature course <sup>1</sup>	ENGH 202 or FRLN L330 (ENG 255 only)	Literature
17	Math or Science #3	4	CHM 112 General Chemistry II	CHEM 212-214	Nat Science
18	Science Course #2	4	PHY 202 General College Physics II	PHYS 245-246	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. Neuroscience

**Students should consult with an advisor to choose appropriate elective courses at Mason, which must be approved by the director of the program. A sample of possible electives is given below. Students may apply no more than 6 credits of courses with a grade of D to this requirement. Students intending to pursue a doctorate in neuroscience or a medical degree are advised to take CHEM 313/315.**

	MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE EQUIVALENT
19	Gen Ed: Written Communication (Upper-level)	3	ENGH 302 Advanced Composition	Written Comm
20	Foundation Courses	4	BIOL 311 General Genetics <b>OR</b> BIOL 322 Developmental Biology <b>OR</b> BIOL 326 Animal Physiology <b>OR</b> BIOL 425 Human Physiology <b>OR</b> BIOL 430 Advanced Human Anatomy and Physiology I	Major
21	Foundation Courses	3	PSYC 375 Brain and Sensory Processes	Major
22	Neuroscience Electives	3	Approved Neuroscience Elective course <sup>2</sup>	Major
23	Neuroscience Electives	3	Approved Neuroscience Elective course <sup>2</sup>	Major
24	Foundation Courses	3	PSYC 376 Brain and Behavior	Major
25	Foundation Courses	2	PSYC 373 Biopsychology Laboratory	Major
26	Neuroscience Electives	3	Approved Neuroscience Elective course <sup>2</sup> (Upper-level)	Major
27	Neuroscience Electives	3	Approved Neuroscience Elective course <sup>2</sup> (Upper-level)	Major
28	General Elective	3	General Electives (Upper-level See: Advisor)	Major
29	Foundation Courses	4	NEUR 327 Cellular, Neurophysiological, and Pharmacological Neuroscience <b>AND</b> NEUR 328 Cellular Neuroscience Lab	Major
30	Neuroscience Electives	3	Approved Neuroscience Elective course <sup>2</sup> (Upper-level)	Major
31	Neuroscience Electives	3	Approved Neuroscience Elective course <sup>2</sup> (Upper-level)	Major
32	Neuroscience Electives	3	Approved Neuroscience Elective course <sup>2</sup> (Upper-level)	Major
33	Neuroscience Electives	2	Approved Neuroscience Elective course <sup>2</sup> (Upper-level)	Major
34	Foundation Courses	3	NEUR 335 Molecular, Developmental, and Systems Neuroscience	Major
35	Foundation Courses	3	NEUR 410 Current Topics in Neuroscience <b>OR</b> NEUR 411 Seminar in Neuroscience	Writing Intensive
36	General Elective	3	General Electives (Upper-level See: Advisor)	General Elective
37	Gen Ed: Information Technology	3	CDS 130 Computing for Scientists	Info Tech & Major
38	Gen Ed: Synthesis	3	Approved Synthesis Course <sup>2</sup>	Synthesis

**B.S. NEUROSCIENCE DEGREE TOTAL 121**

### Important Academic Information:

<sup>1</sup>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.

<sup>2</sup>For approved Neuroscience Electives and Mason Core courses, please visit - <https://catalog.gmu.edu/colleges-schools/science/neuroscience-program/neuroscience-bs/#requirementstext>

**Additional General Notes & Resources:**

- Students interested in Pre-Health Professions (Pre-Med, Pre-Dentistry, Pre-Podiatry, Pre-Optometry, Pre-Veterinary, Pre-Pharmacy, Pre-Physician Assistant, Pre-Occupational Therapy, and Pre-Physical Therapy) are strongly encouraged to meet with the Health Professions Advisor regarding the appropriate prerequisite courses for their field of choice. For more information, please visit: <https://prehealth.gmu.edu/>
- ADVANCE students who earn at least a 2.85 final, cumulative GPA and no more than 9 credits of unrepeatable 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.