

ADVANCE

A NOVA | GEORGE MASON PARTNERSHIP



A.S. Science / B.S. Neuroscience Pathway
2026-2027

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 George Mason University and/or result in termination from ADVANCE. For Milestones #4-#7, failure to meet these milestones may delay matriculation to George Mason.

1. Students must graduate with the NOVA degree aligned with their ADVANCE academic pathway within 4 years of being admitted into ADVANCE. Students must ensure they are enrolled in the matching degree.
2. Students must maintain a minimum 2.5 cumulative GPA at NOVA and must have a minimum 2.5 GPA upon matriculation to George Mason.
3. Students who wish to enroll at George 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 George 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 college level math course 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	GEORGE MASON TRANSFER EQUIVALENT	GEORGE 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 XXX	General Elective
3	BIO 101 Required (NOVA Catalog: 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	Major & Quantitative
6	ENG 112	3	ENG 112 College Composition I	ENGH 101	Written Comm
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	Major & Nat Science
9	Social/Behavioral Sciences	3	PSY 200 Principles of Psychology	PSYC 100	Major & Soc/Behav
10	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 (<i>recommended</i>)	HIST 101T HIST 102T HIST 125	Global History
11	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
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 213-215	Major

14	General Education Elective	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	General Elective
15	CST Course	3	CST 100 Principles of Public Speaking OR 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 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 in Literature OR Any 200-Level ENG Literature course ¹	ENGL 202 or FRLN L330 (ENG 255 only)	Literature
17	Math or Science #3	4	CHM 112 General Chemistry II	CHEM 212-214	Major & 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

Optional concentration: Neuroinformatics

Students should consult with an advisor to choose appropriate elective courses at George 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.

GEORGE MASON DEGREE REQUIREMENT	Credits	Course	GEORGE MASON CORE/DEGREE EQUIVALENT
19 Gen Ed: Written Communication (Upper-level)	3	ENGL 302 Advanced Composition	Written Comm
20 Foundation Courses	4	BIOL 311 General Genetics AND BIOL 313 General Genetics Lab OR BIOL 322 Developmental Biology OR BIOL 326 Animal Physiology OR BIOL 425 Human Physiology OR 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 ²	Major
23 Neuroscience Electives	3	Approved Neuroscience Elective course ²	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 ² (Upper-level)	Major
27 Neuroscience Electives	3	Approved Neuroscience Elective course ² (Upper-level)	Major
28 General Elective	3	General Electives (Upper-level See: Advisor)	General Elective
29 Foundation Courses	5	NEUR 327 Cellular Neuroscience AND NEUR 328 Cellular Neuroscience Lab	Major
30 Neuroscience Electives	3	Approved Neuroscience Elective course ² (Upper-level)	Major
31 Neuroscience Electives	3	Approved Neuroscience Elective course ² (Upper-level)	Major
32 Neuroscience Electives	3-4	Approved Neuroscience Elective course ² (Upper-level)	Major
33 Foundation Courses	3	NEUR 335 Developmental and Systems Neuroscience	Major
34 Foundation Courses	3	NEUR 411 Seminar in Neuroscience	Writing Intensive
35 General Elective	3	General Electives (Upper-level See: Advisor)	General Elective
36 Gen Ed: Information Technology	3	CDS 130 Computing for Scientists	Info Tech & Major

37	Gen Ed: Apex	3	Approved Apex Course ²	Apex
B.S. NEUROSCIENCE DEGREE		120		
TOTAL		120		
<p>Important Academic Information:</p> <p>¹200-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.</p> <p>²For approved Neuroscience Electives and Mason Core courses, please visit - https://catalog.gmu.edu/colleges-schools/science/neuroscience-program/neuroscience-bs/#requirements</p>				
<p>General Education Waiver Policy and Guidance:</p> <ul style="list-style-type: none"> • Students who complete a VCCS transfer associate degree (AS, AA, or AFA) will receive a waiver of the Foundation and Exploration (lower division) Mason Core general education categories, which can be found here: https://catalog.gmu.edu/mason-core/ . To be eligible for the waiver, the students must provide the George Mason Office of Admissions with a final, official transcript reflecting the degree conferral date. As a prerequisite for ENGH 302, ENGH 101 is not waived. Students must complete ENGH 100 or ENGH 101, or an equivalent, with a C or higher. • When a course fulfills a Mason Core requirement and a major or college requirement (e.g. Major & Quant), students must complete the course listed on the pathway to fulfill the major/college requirement. Courses that fulfill only Mason Core Foundation and Exploration categories are recommendations. In most pathways, ADVANCE students must complete a Quantitative Reasoning course to matriculate through ADVANCE. • ADVANCE students must complete the associate degree indicated on their pathway (see the ADVANCE Program Milestones listed above). Students who withdraw from ADVANCE and transfer without the associate degree or UCGS are required to complete each Mason Core general education category. 				
<p>Additional General Notes & Resources:</p> <ul style="list-style-type: none"> • 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/ • For academic policies and procedures, please see the George 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. 				