

A.S. Science / B.S. Neuroscience Pathway **2023-2024**

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 <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 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	UNIV 100	General Elective
2	ENG 111	3	SDV 101 Orientation to XXX	ENGH 101	Written Comm
2		<u> </u>	ENG 111 College Composition I ¹	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 ¹	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
	HIS Course	3	HIS 101 Western Civilizations Pre-1600 CE OR	HIST 101	Global History
10			HIS 102 Western Civilizations Post-1600 CE OR	HIST 102	
			HIS 112 World Civilizations Post-1500 CE (recommended)	HIST 125	
	Humanities/Fine Arts #1 3	3	ART 100 Art Appreciation OR	ARTH 101	Arts
			ART 101 History of Art: Prehistoric to Gothic OR	ARTH 200	
11			ART 102 History of Art: Renaissance to Modern OR	ARTH 201	
			CST 130 Introduction to Theatre OR	THR 101	
			CST 151 Film Appreciation I OR	ENGH L372	
			MUS 121 Music in Society	MUSI 101	
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 OR	GGS 101	Global Understanding
			PLS 140 Introduction to Comparative Politics OR	GOVT 133	
			PLS 241 Introduction to International Relations	GOVT 132	
15	CST Course	3	CST 100 Principles of Public Speaking OR	COMM 100	Oral Comm
			CST 110 Introduction to Human Communication	COMM 101	

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8 Science Course #2	4	PHY 202 General College Physics II	PHYS 245-246	Major
7 Math or Science #3	4	CHM 112 General Chemistry II	CHEM 212-214	Nat Science
		Any 200-Level ENG Literature course ²		
		ENG 275 Women in Literature OR		
		ENG 258 African American Literature OR	255 only)	
16 Humanities/Fine Arts #2	3	ENG 255 World Literature OR	FRLN L330 (ENG	Literature
		ENG 246 American Literature OR	ENGH 202 or	
		ENG 245 British Literature OR		
		ENG 225 Reading Literature: Culture and Ideas OR		

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
	Gen Ed: Written Communication (Upper- level)	3	ENGH 302 Advanced Composition	Written Comm
20	Foundation Courses	4	BIOL 311 General Genetics 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 ³	Major
23	Neuroscience Electives	3	Approved Neuroscience Elective course ³	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 ³ (Upper-level)	Major
27	Neuroscience Electives	3	Approved Neuroscience Elective course ³ (Upper-level)	Major
28	General Elective	3	General Electives (Upper-level See: Advisor)	General Elective
29	Foundation Courses	4	NEUR 327 Cellular Neuroscience AND NEUR 328 Cellular Neuroscience Lab	Major
30	Neuroscience Electives	3	Approved Neuroscience Elective course ³ (Upper-level)	Major
31	Neuroscience Electives	3	Approved Neuroscience Elective course ³ (Upper-level)	Major
32	Neuroscience Electives	3	Approved Neuroscience Elective course ³ (Upper-level)	Major
33	Neuroscience Electives	2	Approved Neuroscience Elective course ³ (Upper-level)	Major
34	Foundation Courses	3	NEUR 335 Developmental and Systems Neuroscience	Major
35	Foundation Courses	3	NEUR 410 Current Topics in Neuroscience OR 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 ³	Synthesis
	. NEUROSCIENCE DEGREE	121		

Important Academic Information:

 1 Students who complete ENG 111 after Spring 2024 will earn ENGH elective for ENG 111 and ENGH 101 for ENG 112.

²200-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.

³For 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/
- Students who complete a VCCS transfer associate degree (AS, AA, & AFA) will receive a waiver of the Foundation and Exploration (lower division) Mason Core general education categories. To be eligible for the waiver, the students must provide the 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.
- 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.