

ADVANCE

A NOVA | MASON PARTNERSHIP

A.S. Science/B.A. Chemistry – Biochemistry
Concentration

2019-20

A.S. Science Pathway (Chemistry)

2019-2020

ADVANCE Program Milestones

1. Students must take SDV 100 or SDV 101 in the first semester at NOVA.
2. Students must begin Developmental coursework in the first semester in ADVANCE at NOVA.
3. Students must take first college-level MTH course and ENG 111 in the semester immediately following the completion of any MTE or ENF courses (excluding summer).
4. 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.
5. Students must complete at least six degree-applicable credits with a C or better each fall and spring semester.
6. Students must maintain a 2.5 cumulative GPA.
7. Students must apply for NOVA graduation and complete their Associate's degree.

	NOVA DEGREE REQUIREMENT SEQUENCE	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	Elective
2	ENG 111	3	ENG 111 College Composition I	ENGH 101	Written Comm
3	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
4	MTH 167	5	MTH 167 Pre-Calculus with Trigonometry	MATH 105	ELECTIVE
5	ITE 115 or General Education	4	CHM 111 College Chemistry I	CHEM 211-213	NAT SCIENCE
6	ENG 112	3	ENG 112 College Composition II	ENGH XXX	Elective
7	CST Course	3	CST 100 Principles of Public Speaking OR CST 110 Introduction to Communication	COMM 100 COMM 101	Oral Comm
8	MTH 263	4	MTH 263 Calculus I	MATH 113	Quant
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 PLS 211 United States Government I OR PSY 200 Principles of Psychology OR PSY 230 Developmental Psychology OR SOC 200 Principles of Sociology OR SOC 212 Principles of Anthropology II	ECON 104 ECON 103 GGG 103 HIST 121 HIST 122 GOVT 103 GOVT 103 PSYC 100 PSYC 211 SOCI 101 ANTH 114	Soc/Behav
10	Science Course #1	4	CHM 112 College Chemistry II	CHEM 212-214	DEGREE
11	MTH 264	4	MTH 264 Calculus II	MATH 114	Elective
12	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
13	Math or Science #1	4	BIO 101 General Biology I	BIOL 103	NAT SCIENCE
14	Math or Science #2	5	PHY 231 General University Physics I	PHYS 160-161- 266	DEGREE
15	Math or Science #3	5	PHY 232 General University Physics II	PHYS 260-261- XXX	DEGREE
16	Science Course #2	4	BIO 206 Cell Biology	BIOL 213	DEGREE

17	Social/Behavioral Sciences #2	3	GEO 220 World Regional Geography OR PLS 140 Introduction to Comparative Gov't OR PLS 241 International Relations I	GGS 101 GOVT 133 GOVT 132	Global & COS Soc/Behav (Select discipline different from Soc/Behav above)
18	Humanities/Fine Arts #2	3	REL 231 Religions of the World I OR REL 232 Religions of the World II OR REL 233 Introduction to Islam	RELI 212 RELI 211 RELI 272	COS Phil/Rel & Non-Western
A.S. SCIENCE DEGREE TOTAL		64			

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

	MASON DEGREE REQUIREMENT SEQUENCE	Credits	Course	MASON CORE/DEGREE EQUIVALENT	
19	Chemistry Courses	5	CHEM 313 Organic Chemistry I AND CHEM 315 Organic Chemistry Lab I	DEGREE	
20	College Requirement: Foreign Language	6	Approved foreign language course*	DEGREE	
21	Gen Ed: Literature	3	Approved Literature course** (Upper-level)	Literature	
22	Chemistry Courses	4	CHEM 321 Elementary Quantitative Analysis	DEGREE	
23	Chemistry Courses	5	CHEM 314 Organic Chemistry II AND CHEM 318 Organic Chemistry Lab II	DEGREE	
24	Gen Ed: Written Communication (Upper level)	3	ENGH 302 Advanced Composition	Written Comm	
25	Chemistry Courses	5	CHEM 331 Physical Chemistry I AND CHEM 336 Physical Chemistry Lab I	Writing Intensive	
26	Chemistry Courses	4	CHEM 463 General Biochemistry I	DEGREE	
27	College Requirement: Foreign Language	3	Approved foreign language course*	DEGREE	
28	Chemistry Courses	5	CHEM 464 General Biochemistry II AND CHEM 465 Biochemistry Lab	DEGREE	
29	Gen Ed: Information Technology	3	Approved IT Course (Upper-level)**	Info Tech	
30	Chemistry Courses	3	CHEM 446 Bioinorganic Chemistry	DEGREE	
31	College Requirement: Foreign Language	3	Approved foreign language course*	DEGREE	
32	Mathematics and Statistics Courses	3	STAT 250 Introductory Statistics I	DEGREE	
33	General Elective	2	General Electives (Upper-level See: Advisor)	DEGREE	
33	Gen Ed: Synthesis	3	Approved Synthesis Course**	Synthesis	
B.A. CHEMISTRY DEGREE TOTAL		124			

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

For academic policies and procedures, please see Mason catalog - <https://catalog.gmu.edu/policies/>

*For approved Foreign Language Courses, please visit - <https://catalog.gmu.edu/colleges-schools/humanities-social-sciences/modern-classical-languages/>

**For approved Mason Core courses, please visit - <https://catalog.gmu.edu/mason-core/>

General Note: Students majoring in chemistry must complete the chemistry program requirements with a minimum GPA of 2.30 and present no more than two courses with a grade of 'D' (1.00) in CHEM coursework at graduation.

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 seeking a bachelor's degree must apply at least 45 credits of upper-level courses (numbered 300 or above) toward graduation requirements