

ADVANCE

A NOVA | MASON PARTNERSHIP

A.S. Science/ B.A. Chemistry - All Concentrations Pathway
2020-2021

A.S Science

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 MTT 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 approve for NOVA graduation and complete their Associate's degree.

	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	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	HIST 101	Western Civ
			HIS 102 History of Western Civilization II OR HIS 112 History of World Civilization II	HIST 102 HIST 125	
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	Major
6	ENG 112	3	ENG 112 College Composition II	ENGH XXX	Elective
7	CST Course	3	CST 100 Principles of Public Speaking OR	COMM 100	Oral Comm
			CST 110 Introduction to Communication	COMM 101	
8	MTH 263	4	MTH 263 Calculus I	MATH 113	Quantitative
9	Social/Behavioral Sciences #1	3	ECO 201 Principles of Macroeconomics OR	ECON 104	Soc/Behav
			ECO 202 Principles of Microeconomics OR	ECON 103	
			GEO 210 Introduction to Cultural Geography OR	GGG 103	
			HIS 121 United States History I OR	HIST 121	
			HIS 122 United States History II OR	HIST 122	
			PLS 135 American National Politics OR	GOVT 103	
			PLS 211 United States Government I OR	GOVT 103	
			PSY 200 Principles of Psychology OR	PSYC 100	
PSY 230 Developmental Psychology OR	PSYC 211				
SOC 200 Principles of Sociology OR	SOCI 101				
SOC 211 Principles of Anthropology I	ANTH 114				
10	Science Course #1	4	CHM 112 College Chemistry II	CHEM 212-214	Major
11	MTH 264	4	MTH 264 Calculus II	MATH 114	Elective
12	Humanities/Fine Arts #1	3	ART 100 Art Appreciation OR	ARTH 101	Arts
			ART 101 History and Appreciation of Art I OR	ARTH 200	
			ART 102 History and Appreciation of Art II OR	ARTH 201	
			CST 130 Introduction to Theatre OR	THR 101	
			CST 151 Film Appreciation I OR	ENGH L372	
MUS 121 Music Appreciation I	MUSI 101				
13	Math or Science #1	4	BIO 101 General Biology I	BIOL 103	Nat Science
14	Math or Science #2	4-5	Biochemistry Concentration:	PHYS 243-244	Nat Science
			PHY 201 General College Physics I	PHYS 243-244	
			No Concentration:	PHYS 160-161-266	
			PHY 201 General College Physics I OR		
			PHY 231 General University Physics I		

15	Math or Science #3	4-5	Biochemistry Concentration: PHY 202 General College Physics I No Concentration: PHY 202 General College Physics I OR PHY 232 General University Physics I	PHYS 245-246 PHYS 245-246 PHYS 260-261-XXX	Major
16	Science Course #2	4	BIO 206 Cell Biology	BIOL 213	Major
17	Social/Behavioral Sciences #2 <i>(Must select discipline different from Soc/Behav above)</i>	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
18	Humanities/Fine Arts #2	3	ENG 236 Introduction to the Short Story OR ENG 241 Survey of American Literature I OR ENG 242 Survey of American Literature II OR ENG 251 Survey of World Literature I OR ENG 252 Survey of World Literature II OR ENG 253 Survey of African-American Literature I	ENGH 202	Literature

A.S. SCIENCE DEGREE TOTAL 62-64

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

B.A. Chemistry

Select Biochemistry Concentration or No Concentration.

MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE
19 Chemistry Courses	5	CHEM 313 Organic Chemistry I AND CHEM 315 Organic Chemistry Lab I	Major
20 College Requirement: Phil/Reli & Non-Western Course	3	Approved Phil/Reli & Non-Western Course (<i>Upper-level</i>)	COS Phil/Rel & Non-Western
21 Mathematics Courses	3	No Concentration: MATH 213 Analytical Geometry and Calculus III OR Biochemistry Concentration: STAT 250 Statistics I	Major
22 College Requirement: Foreign Language	6	Approved foreign language course*	Major
23 Gen Ed: Written Communication (UL)	3	ENGH 302 Advanced Composition	Written Comm
24 Chemistry Courses	4	CHEM 321 Elementary Quantitative Analysis	Major
25 Chemistry Courses	5	CHEM 314 Organic Chemistry II AND CHEM 318 Organic Chemistry Lab II	Major
26 College Requirement: Foreign Language	3	Approved foreign language course*	Major
27 Chemistry Courses	5	CHEM 331 Physical Chemistry I AND CHEM 336 Physical Chemistry Lab I	Writing Intensive
28 Chemistry Courses	4-5	No Concentration: Any 5 credits of electives in CHEM (<i>Upper-level</i>) OR Biochemistry Concentration: CHEM 463 General Biochemistry I	Major
29 Chemistry Courses	5	No Concentration: CHEM 332 Physical Chemistry II AND CHEM 337 Physical Chemistry Lab II OR Biochemistry Concentration: CHEM 464 General Biochemistry II AND CHEM 465 Biochemistry Lab	Major
30 Gen Ed: Information Technology	3	Approved Information Technology course** (<i>Upper-level</i>)	Info Tech
31 Chemistry Courses	3	Biochemistry Concentration: CHEM 446 Bioinorganic Chemistry OR No Concentration: General Electives (<i>Upper-level</i> See: Advisor)	Major

32	College Requirement: Foreign Language	3	Approved foreign language course*	Major
33	General Elective	1-2	General Electives (<i>Upper-level</i> See: Advisor)	Major
34	Gen Ed: Synthesis	3	Approved Synthesis Course**	Synthesis

B.A. CHEMISTRY DEGREE		124		
TOTAL				

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.