

# ADVANCE

A NOVA | MASON PARTNERSHIP

A.S. Science / B.S. Medical Laboratory  
Sciences 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 apply for NOVA graduation and complete their Associate's degree.

Responsibility for applying to schools of medical laboratory sciences and gaining admission rests with the student; however, guidance is provided by the medical laboratory sciences program director. Admission to medical laboratory sciences schools is selective, so candidates should strive for strong academic standing (2.5 science GPA or higher). Students who fail to gain admission to a NAACLS-approved school are unable to complete this degree program. Such students may transfer to Biology, BA or the Biology, BS without loss of credits.

Application to medical laboratory sciences schools should be initiated about a year before the desired entrance date. This fact, coupled with the large number of required courses in the pre-professional curriculum, makes it imperative that students in the program consult regularly with their Mason advisor. All medical laboratory sciences majors and prospective majors are urged to enroll in MLAB 200 Introduction to Medical Laboratory Science as early as possible. This course provides information on the profession, as well as the educational demands placed on candidates.

	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	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 <b>OR</b> HIS 102 History of Western Civilization II <b>OR</b> 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 General 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 <b>OR</b> CST 110 Introduction to Communication	COMM 100 COMM 101	Oral Comm
8	MTH 263	4	MTH 263 Calculus I	MATH 113	Quantitative
9	Social/Behavioral Sciences #1	3	ECO 201 Principles of Macroeconomics <b>OR</b> ECO 202 Principles of Microeconomics <b>OR</b> GEO 210 Introduction to Cultural Geography <b>OR</b> HIS 121 United States History I <b>OR</b> HIS 122 United States History II <b>OR</b> PLS 135 American National Politics <b>OR</b> PLS 211 United States Government I <b>OR</b> PSY 200 Principles of Psychology <b>OR</b> PSY 230 Developmental Psychology <b>OR</b> SOC 200 Principles of Sociology <b>OR</b> SOC 212 Principles of Anthropology II	ECON 104 ECON 103 GGS 103 HIST 121 HIST 122 GOVT 103 GOVT 103 PSYC 100 PSYC 211 SOCI 101 ANTH 120	Soc/Behav

10	Science Course #1	4	CHM 112 General Chemistry II	CHEM 212-214	Major
11	MTH 264 (MTH 245 allowed)	4	MTH 264 Calculus II <b>OR</b> MTH 245 Statistics I	MATH 114 STAT 250	Elective
12	Humanities/Fine Arts #1	3	ART 100 Art Appreciation <b>OR</b> ART 101 History and Appreciation of Art I <b>OR</b> ART 102 History and Appreciation of Art II <b>OR</b> CST 130 Introduction to Theatre <b>OR</b> CST 151 Film Appreciation I <b>OR</b> MUS 121 Music Appreciation I	ARTH 101 ARTH 200 ARTH 201 THR 101 ENGL L372 MUSI 101	Arts
13	Math or Science #1	4	BIO 101 General Biology I	BIOL 103	Nat Science
14	Math or Science #2	4	BIOL 214 Biostatistics for Biology Majors	BIOL 214	Major
15	Math or Science #3	4	BIO 206 Cell Biology	BIOL 213	Major
16	Science Course #2	4	BIO 205 General Microbiology	BIOL L305/L306	Major
17	Social/Behavioral Sciences #2	3	GEO 220 World Regional Geography <b>OR</b> PLS 140 Introduction to Comparative Gov't <b>OR</b> PLS 241 International Relations I	GGG 101 GOVT 133 GOVT 132	Global
18	Humanities/Fine Arts #2	3	ENG 236 Introduction to the Short Story <b>OR</b> ENG 241 Survey of American Literature I <b>OR</b> ENG 242 Survey of American Literature II <b>OR</b> ENG 251 Survey of World Literature I <b>OR</b> ENG 252 Survey of World Literature II <b>OR</b> ENG 253 Survey of African-American Literature I	ENGL 202	Literature

**A.S. SCIENCE DEGREE TOTAL 62**

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

## B.S. Medical Laboratory Science

**Students must complete the requirements outlined below, choosing one Professional Study/Concentration option: Generalist; Molecular Biology; Microbiology; Histotechnology.**

***Not choosing a concentration ("Professional Study: Generalist Option") will provide students generalist training. Upon graduation, the board certification test may be taken and would allow graduates to practice in any area of a hospital or laboratory. Choosing a concentration will allow students to complete their clinical rotations in that specific area. Upon graduation, the Molecular Biology or Microbiology (depending upon the concentration chosen) board certification test may be taken.***

	MASON DEGREE REQUIREMENT	Credits	Course	MASON CORE/DEGREE EQUIVALENT
19	MLAB and BIOL Additional Courses	1	MLAB 200 Introduction to Medical Laboratory Science	Major
20	Gen Ed: Information Technology	3	CDS 130 Computing for Scientists	Info Tech
21	MLAB and BIOL Additional Courses	4	BIOL 311 General Genetics	Major
22	Chemistry	5	CHEM 313 Organic Chemistry I <b>AND</b> CHEM 315 Organic Chemistry Lab I	Major
23	Gen Ed: Written Communication (UL)	3	ENGL 302 Advanced Composition	Written Comm
24	MLAB and BIOL Additional Courses	4	BIOL 430 Advanced Human Anatomy and Physiology I	Major
25	Chemistry	4-5	CHEM 314 Organic Chemistry II <b>AND</b> CHEM 318 Organic Chemistry Lab II <b>OR</b> BIOL 483 Biochemistry	Major
26	MLAB and BIOL Additional Courses	2	MLAB 300 Science Writing	Writing Intensive
27	Gen Ed: Synthesis	3	Approved Synthesis Course**	Synthesis
28	MLAB and BIOL Additional Courses	4	BIOL 431 Advanced Human Anatomy and Physiology II	Major
29	MLAB and BIOL Additional Courses	4	BIOL 452 Immunology <b>AND</b> BIOL 453 Immunology Laboratory	Major
30	Professional Study: Concentration	12	Approved Professional Study course (See: Advisor)***	Major

31	Professional Study: Concentration	12	Approved Professional Study course (See: Advisor)***	Major
32	Professional Study: Concentration	3	Approved Professional Study course (See: Advisor)***	Major
33	Professional Study: Concentration	3	Approved Professional Study course (See: Advisor)***	Major

**B.S. MED LAB SCIENCE** **129-130**  
**DEGREE 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/>

\*Students who are placed directly into MTH 263 may take PHY 201 instead of MTH 167.

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

\*\*\*For approved Professional Study concentration courses, please visit: <https://catalog.gmu.edu/colleges-schools/science/biology/medical-laboratory-science-bs/#requirements>

General Note: This program requires the equivalent of three years of full-time pre-professional study at the college level preceding a senior year of professional education in an affiliated school of medical laboratory science. All affiliated schools (see below) are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS):

1. Students must complete MLAB 200 Introduction to Medical Laboratory Science and present their biology coursework and supporting requirements with a minimum GPA of 2.00.
2. A grade of 'C' or better must be earned in BIOL 213 Cell Structure and Function (Mason Core) in order to advance to other major requirements. Students may repeat BIOL 213 Cell Structure and Function (Mason Core) once and a second time only with permission of the Department of Biology.
3. Medical laboratory science majors must earn a minimum of 'C' in all biology core courses.

Senior Year: Students should be aware that the senior year spent off campus requires the following special interpretation of university policies. Transfer students must present at least 16 credits of 300 to 400-level biology or chemistry coursework taken at Mason. Students may present no more than 6 credits of 'D' grades in biology and chemistry courses required in three years of pre-professional study. No unsatisfactory grades may be presented for courses in the senior year of professional study. Transfer students entering with more than 45 transfer credits are often unable to complete the pre-professional phase of their program in the usual three years of full-time study. Senior students are registered at the university through special procedures. For details, consult the program director.

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