

Medical Laboratory Science

The Medical Laboratory Science (MLS) major (120 semester hours) at Winston-Salem State University is a nationally accredited **four-year curriculum** leading to the **Bachelor of Science degree in Medical Laboratory Science**. The curriculum is designed for learners with a strong background in basic sciences interested in a professional career as a medical laboratory scientist. During the first two years of the curriculum – the *pre-professional phase* – students are required to complete the university’s general education courses and pre-requisite courses (60 semester credit hours). The final two years—the *professional phase*—emphasizes medical courses including clinical chemistry, microbiology, hematology, immunohematology, and molecular diagnostics (60 semester credit hours). Upon satisfactory completion of the degree requirements, students are eligible to take national certification examinations. Winston-Salem State University Medical Laboratory Science Program is the largest contributor of minority graduates to the laboratory workforce in the state of North Carolina. Over 90% of graduates find jobs within 6 months.

Winston-Salem State University, founded in 1892, is one of the 16 constituent institutions of the University of North Carolina. Winston-Salem State University ranks among the nation’s top historically black colleges and universities (HBCU), providing high quality baccalaureate, master, and doctoral level education. Winston-Salem State University enrolls approximately 5000 students and is in Winston-Salem (Forsyth County), North Carolina. WSSU is committed to equality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, national origin, religion, gender, age, or disability.

If you interested in learning about the medical laboratory science at WSSU, contact us at mccauley@wssu.edu or call at 336-750-2510. More information about the profession access www.americanmedtech.org, www.asMLS.org, or www.ascp.org.

The Medical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAAMLS), 5600 N. River Rd., Suite 720, Rosemont, Ill. 60018-5119, PH: 773-714-8880, and EMAIL: <http://www.naaMLS.org>.

COURSE REQUIREMENTS			
MLS BS Degree – 120 SH			
1. GENERAL EDUCATION COURSES – 39 Semester Hours			
Courses selected by the student and the academic advisor.			
2. PRE-PROFESSIONAL PRE-REQUISITE COURSES – 21 Semester Hours			
These courses count toward the 60-hour General Education requirement.			
Course Number	Course	Hours	Comments
MLS 1301	Behind the Scenes: The Science of Healthcare	3	
BIO 2311	Anatomy & Physiology I	3	
&	<i>(Biology 1313 – General Biology pre-requisite)</i>		
BIO 2111	Anatomy & Physiology I LAB	1	
Any statistics 3 SH course	Please check the course catalog for available WSSU statistics courses.	3	
CHE 1314	General Chemistry II	3	Or MLS 2405 Foundations of Clinical Chemistry – 4 SH)
&	<i>(CHE 1313) – General Chemistry I pre-requisite)</i>		
CHE 1114	General Chemistry II LAB	1	
	<i>(CHE 1113 – General Chemistry Lab pre-requisite)</i>		
MLS 2302 or CHE 2326	Medical Biochemistry or Organic Chemistry I	3	
MLS 1303 or BIO 1331	Infectious Disease in Modern Society or General Microbiology	3	
& (MLS majors ONLY)			
MLS 1103 or BIO 1131	Infectious Disease in Modern Society or General Microbiology LAB	1	

3. PROFESSIONAL PHASE COURSES – 60 Semester Hours

	Fall Semester 1st year professional phase (16 SH)		Comments
Course Number	Course	Hours	
MLS 3300	Clinical Chemistry	3	
MLS 3100	Clinical Chemistry LAB	1	
MLS 3302	Hematology	3	
MLS 3102	Hematology LAB	1	
MLS 3303	Clinical Microbiology	3	
MLS 3103	Clinical Microbiology LAB	1	
MLS 3205	Intro to Research	2	
MLS 3207	UA/Body Fluids	2	
	Spring Semester 1st year professional phase (15 SH)		
MLS 3308	Advanced Clinical Microbiology	3	
MLS 3108	Advanced Clinical Microbiology LAB	1	
MLS 3305	Advanced Clinical Chemistry	3	
MLS 3105	Advanced Clinical Chemistry LAB	1	
MLS 3306	Advanced Hematology	3	
MLS 3106	Advanced Hematology LAB	1	
MLS 3210	Immunology/Serology	2	
MLS 3107	Immunology/Serology LAB	1	
	Fall Semester 2nd year professional phase (15 SH)		
MLS 4304	Immunochemistry	3	
MLS 4104	Immunochemistry LAB	1	
MLS 4105	MLS Management	1	
MLS 4106	MLS Education	1	
MLS 4206	Community Clinical Experience	2	
MLS 4305	Methods & Procedures	3	
MLS 4303	Molecular Diagnostics	3	
MLS 4103	Molecular Diagnostics LAB	1	
	Spring Semester 2nd year professional phase (14 SH)		
MLS 4102	Seminar (MLS Capstone)	1	
MLS 4300	Chemistry Practicum	3	
MLS 4207	Immunochemistry Practicum	2	
MLS 4208	Microbiology Practicum	2	
MLS 4313	Hematology/Coagulation Practicum	3	
MLS 4314	MLS Simulation Practicum	3	



Medical Laboratory Science Takes Charge