

MEDICAL LABORATORY SCIENCE, BACHELOR OF SCIENCE (B.S.)

The program offers a Bachelor of Science (B.S.) degree in Medical Laboratory Science. The MLS program consists of four years of study. The first two years or pre-MLS phase include general education courses and supporting courses and the last two years or upper-division MLS phase include major course requirements for the MLS program, with classes in hematology, clinical chemistry, microbiology, immunohematology, immunology, serology, body fluids, and clinical practicums in hospital laboratory affiliated with the program.

Professional Liability Insurance and Criminal Records

Students enrolling in the following clinical practicum courses in the MLS program – are required to register for student Professional Liability Insurance (PLI) and submit to a drug screen and criminal background check:

Code	Title	Hours
MLS 432	Clinical Chemistry Practicum	5
MLS 434	Clinical Microbiology Practicum	4
MLS 438	Hematology Practicum	4
MLS 439	Urinalysis Practicum	1
MLS 440	Blood Bank Practicum	2
MLS 441	Immunology Practicum	1

The PLI fee is listed in each semester's schedule of classes. Please see the section on Student Liability Insurance for the College of Health Sciences. Information about the cost and application for the drug screen and criminal background check will be given to the student before they enter the clinical practicum.

Admission Requirements

All students who are admitted to the University by the ECU Admissions Office and declare their major as medical laboratory science (MLS) are initially placed into the pre-MLS major phase/curriculum. This curriculum includes the following supporting courses:

Code	Title	Hours
MAT 114	College Algebra (or higher)	3
CHE 111 & 111L	General Chemistry and General Chemistry Lab I	4
CHE 112 & 112L	General Chemistry II and General Chemistry Lab	4
HSA 200	Medical Terminology	3
BIO 111	Cell and Molecular Biology	4
BIO 308 or BIO 348	Human Anatomy and Physiology II or Vertebrate Physiology	3
MLS 201	Introduction to Medical Laboratory	3
MLS 209	Microbiology for Health Sciences	3
MLS 211	Medical Microbiology Laboratory	1
MLS 290	Medical Biochemistry	3

Admission into the "Upper-Division" phase of the MLS program requires completion of pre-MLS curriculum with an overall and supporting grade point average (GPA) of at least 2.5 with a grade of "C" or better in all courses. Transfer students must maintain a GPA of 2.5 in courses at ECU as well as an overall GPA of 2.5. After completing the pre-MLS curriculum requirements, students may formally apply for entry/admission into the Medical Laboratory Science program. Students who meet the minimum requirements are placed into an applicant pool and the department reserves the right to accept only the best qualified applicants.

Students who meet the minimum requirements will be accepted into the program within the enrollment limits determined by the program. The Program reserves the right to accept only the best qualified applicants who meet the minimum requirements.

Progression Criteria

To remain in the upper division MLS program, a student must maintain an overall GPA of 2.5 with a grade "C"/2.0 or better in all upper-division MLS phase courses. Students who fail to meet the requirements for progression will be dismissed from the MLS program and must apply for readmission through the Admission and Continuation Committee. Readmission to the MLS program is not guaranteed and the Committee reserves the right to readmit any student.

Program Requirements

CIP Code: 51.1005

Summary Checklist for General Education

Code	Title	Hours
Element 1		
A:	Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3
B:	Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3
C:	Oral Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3
Element 2		
	Quantitative Reasoning (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/)	3
Element 3		
A:	Arts (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)	3
B:	Humanities (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)	3
Element 4		
	Natural Sciences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/)	6
Element 5		
A:	Historical Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)	3
B:	Social Behavioral Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)	3

Element 6

Diversity of Perspectives Experiences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/)	6
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Total Hours **36**

Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

Major

Code	Title	Hours
University Graduation Requirements		
General Education		36

Student Success Seminar

H50 100	Student Success Seminar (waived for transfers with 30+ hrs.)	1
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Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories)

Major Requirements*Core Courses*

MLS 201	Introduction to Medical Laboratory	3
MLS 209	Microbiology for Health Sciences	3
MLS 290	Medical Biochemistry	3
MLS 211	Medical Microbiology Laboratory	1
MLS 300	Clinical Laboratory Administration	2
MLS 303	Clinical Laboratory Skills	1
MLS 305	Analysis of Body Fluids	4
MLS 308	Serology and Molecular Techniques	2
MLS 309	Clinical Immunology	1
MLS 310	Hematology and Coagulation	5
MLS 320	Immunohematology	3
MLS 346	Clinical Chemistry	5
MLS 350	Bacteriology	5
MLS 355	Mycology, Parasitology, and Virology	4
MLS 431	Clinical Correlations	3
MLS 432	Clinical Chemistry Practicum	5
MLS 434	Clinical Microbiology Practicum	4
MLS 436	Lab Management and Education	1
MLS 437	Clinical Laboratory Seminar	3
MLS 438	Hematology Practicum	4
MLS 439	Urinalysis Practicum	1
MLS 440	Blood Bank Practicum	2
MLS 441	Immunology Practicum	1

Supporting Course Requirements

BIO 111	Cell and Molecular Biology (Element E-4) ^G	
BIO 308	Human Anatomy and Physiology II	3
	or BIO 348 Vertebrate Physiology	
CHE 111	General Chemistry (Element E-4) ^G	
CHE 111L	General Chemistry Lab I	1
CHE 112 & 112L	General Chemistry II and General Chemistry Lab	4
HSA 200	Medical Terminology	3
MAT 114	College Algebra (or higher) (Element E-2) ^G	
CMS 210	Public Speaking (Element 1C) ^G	

CMS 215	Business and Professional Presentations (Element 1C) ^G
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Free Electives

Choose from 6 hours of free electives	6
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Total Hours **120**

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Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.