

# HEALTH SERVICES, MEDICAL LABORATORY SCIENCES, BS

## Bachelor of Science in Health Services, Medical Laboratory Sciences (275020BS)

The Applied Bachelor of Science in Health Services, Medical Laboratory Sciences program provides a balanced combination of academic knowledge and experiential training to meet the needs of today's healthcare employers. This degree offers an efficient, flexible, and career-focused pathway for students pursuing a bachelor's degree in medical laboratory sciences, and preparation for the certification exam(s) required to work as a credentialed medical technologist. Through rigorous coursework and hands-on laboratory experience, students develop the expertise required to excel in clinical laboratory settings. Graduates are well-equipped to advance in their current careers or pursue graduate and advanced professional-level training programs, enhancing their opportunities for leadership roles in the healthcare industry.

## Requirements for Admission

Admission to the University of Akron.

## Contact Information

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The following information has official approval of **The School of Allied Health** and **The College of Health and Human Sciences**, but is intended only as a guide. Completion of this certificate is contingent upon many factors, including but not limited to: class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, prerequisites, among others.

## Requirements Summary

Code	Title	Hours
	General Education Requirements ( <a href="https://bulletin.uakron.edu/undergraduate/general-education/">https://bulletin.uakron.edu/undergraduate/general-education/</a> )	27
	Health Services Core Courses	15
	MLS Prerequisite Courses	53
	MLS Core Courses	38
<b>Total Hours</b>		<b>133</b>

## General Education Courses

Code	Title	Hours
Students pursuing a bachelor's degree must complete the following General Education coursework. Diversity courses may also fulfill major or Breadth of Knowledge requirements. Integrated and Applied Learning courses may also fulfill requirements in the major.		
<b>Academic Foundations</b>		<b>12</b>
	<i>Mathematics, Statistics and Logic: 3 credit hours</i>	
	<i>Speaking: 3 credit hours</i>	
	<i>Writing: 6 credit hours</i>	

<b>Breadth of Knowledge</b>	<b>22</b>
<i>Arts/Humanities: 9 credit hours</i>	
<i>Natural Sciences: 7 credit hours</i>	
<i>Social Sciences: 6 credit hours</i>	
<b>Diversity</b>	
Domestic Diversity	
Global Diversity	
<b>Integrated and Applied Learning</b>	<b>2</b>
<i>Select one class from one of the following subcategories:</i>	
Complex Issues Facing Society	
Capstone	
<i>Review the General Education Requirements page for detailed course listings.</i>	
<b>Total Hours</b>	<b>36</b>

## Health Services Core Courses

Code	Title	Hours
BAHA 120	Medical Terminology	3
BAHA 200	Introduction to Health Care Services	3
BAHA 220	Introduction to Health Care Analytics	3
BAHA 402	Quality Management in Health Care	3
CHHS 420	Evidence-Based Practice & Research Applications for Health Professions	3
<b>Total Hours</b>		<b>15</b>

## MLS Prerequisite Courses

Code	Title	Hours
ANAT 206	Applied Human Anatomy & Physiology I	3
ANAT 207	Applied Human Anatomy & Physiology II	3
ANAT 210	Applied Human Anatomy & Physiology Lab I	1
ANAT 211	Applied Human Anatomy & Physiology Lab II	1
ANAT 350	Clinical Applications of Immunology for the Health Professions	3
BIOL 130	Principles of Microbiology	3
BIOL 211	General Genetics	3
BIOL 311	Cell & Molecular Biology	4
CHEM 151	Principles of Chemistry I	3
CHEM 152	Principles of Chemistry I Laboratory	1
CHEM 153	Principles of Chemistry II	3
CHEM 154	Qualitative Analysis	2
CHEM 263	Organic Chemistry Lecture I	3
CHEM 264	Organic Chemistry Lecture II	3
CHEM 265	Organic Chemistry Laboratory I	2
CHEM 266	Organic Chemistry Laboratory II	2
CHEM 401	Biochemistry Lecture I	3
STAT 260	Basic Statistics	3
PHIL 120	Introduction to Ethics	3
PHYS 261	College Physics I	4
SOCIO 100	Introduction to Sociology	3
<b>Total Hours</b>		<b>56</b>

## MLS Core Courses

Code	Title	Hours
MLSC 400	Clinical Bacteriology	4
MLSC 401	Immunohematology	4
MLSC 403	Clinical Chemistry	5
MLSC 404	Coagulation	2
MLSC 405	Clinical Hematology	5
MLSC 406	Clinical Immunology	3
MLSC 407	Laboratory Management	2
MLSC 408	Molecular Diagnosis	3
MLSC 409	Diagnostic Mycology/Mycobacteriology	3
MLSC 410	Diagnostic Parasitology	3
MLSC 411	Clinical Phlebotomy	2
MLSC 412	Clinical Microscopy and Urinalysis	2
<b>Total Hours</b>		<b>38</b>

## Recommended Sequence

### 1st Year

Fall Semester		Hours
ANAT 206	Applied Human Anatomy & Physiology I	3
ANAT 210	Applied Human Anatomy & Physiology Lab I	1
CHEM 151	Principles of Chemistry I	3
CHEM 152	Principles of Chemistry I Laboratory	1
STAT 260	Basic Statistics	3
	Writing I Requirement	3
	Speaking Requirement	3
<b>Hours</b>		<b>17</b>

### Spring Semester

ANAT 207	Applied Human Anatomy & Physiology II	3
ANAT 211	Applied Human Anatomy & Physiology Lab II	1
BAHA 120	Medical Terminology	3
CHEM 153	Principles of Chemistry II	3
CHEM 154	Qualitative Analysis	2
	Writing II Requirement	3
<b>Hours</b>		<b>15</b>

### 2nd Year

Fall Semester		Hours
BAHA 200	Introduction to Health Care Services	3
BAHA 220	Introduction to Health Care Analytics	3
BIOL 130	Principles of Microbiology	3
CHEM 263	Organic Chemistry Lecture I	3
CHEM 265	Organic Chemistry Laboratory I	2
	Social Science Requirement	3
<b>Hours</b>		<b>17</b>

### Spring Semester

CHEM 264	Organic Chemistry Lecture II	3
CHEM 266	Organic Chemistry Laboratory II	2
PHIL 120	Introduction to Ethics	3
PHYS 261	College Physics I	4

Global Diversity Requirement		3
<b>Hours</b>		<b>15</b>
3rd Year		
Fall Semester		
ANAT 350	Clinical Applications of Immunology for the Health Professions	3
BIOL 211	General Genetics	3
CHEM 401	Biochemistry Lecture I	3
SOCIO 100	Introduction to Sociology	3
	Arts/Humanities Requirement	3
<b>Hours</b>		<b>15</b>
Spring Semester		
BAHA 121	Study of Disease Processes	3
BAHA 402	Quality Management in Health Care	3
CHHS 420	Evidence-Based Practice & Research Applications for Health Professions	3
BIOL 311	Cell & Molecular Biology	4
	Arts Requirement	3
<b>Hours</b>		<b>16</b>
Summer Semester		
MLSC 400	Clinical Bacteriology	4
MLSC 406	Clinical Immunology	3
MLSC 409	Diagnostic Mycology/Mycobacteriology	3
MLSC 410	Diagnostic Parasitology	3
<b>Hours</b>		<b>13</b>
4th Year		
Fall Semester		
MLSC 403	Clinical Chemistry	5
MLSC 408	Molecular Diagnosis	3
MLSC 412	Clinical Microscopy and Urinalysis	2
MLSC 411	Clinical Phlebotomy	2
<b>Hours</b>		<b>12</b>
Spring Semester		
MLSC 401	Immunohematology	4
MLSC 404	Coagulation	2
MLSC 405	Clinical Hematology	5
MLSC 407	Laboratory Management	2
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>133</b>