

The Associate of Applied Science (AAS) degree in Medical Laboratory Technology is designed to prepare qualified technicians to perform a variety of complex laboratory tests which play an important role in the detection, diagnosis, and treatment of many diseases and in the promotion of health. Upon successful completion of the program, graduates are eligible to take national examinations to become certified Medical Laboratory Technicians.

As a certified MLT, employment is available in hospitals and clinics as well as veterinary, industrial and environmental laboratories in Colorado or in other states.

The MLT Program is delivered in an online/hybrid format and is available in a 1-year fast track option and 2-year traditional route. More than two years may be taken to complete the program. Students may begin general education classes at any time, according to published semester schedules. All MLT didactic courses are offered in a hybrid format. Student lab sessions meet on select Fridays from 4:30 pm to 8:30 pm and on Saturdays 9:30 am to 4:30 pm.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Required Courses	Credits	Pre or Co Reqs Rqd	Course Availability		
			Fall	Spr	Sum
<b>General Education Courses</b>					
• BIO 201 - Human Anatomy and Physiology I with Lab: GT-SC1* (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• BIO 202 - Human Anatomy and Physiology II with Lab: GT-SC1 (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CHE 101 - Introduction to Chemistry I w/Lab OR CHE 111 General College Chemistry w/Lab*	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• CIS 118 - Intro to PC Applications (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• COM 115 - Public Speaking* OR COM 125 - Interpersonal Communication (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1*	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• HPR 144 - Comprehensive Medical Terminology (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Major Courses</b>					
• MLT 131 - Hematology I (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• MLT 132 - Hematology II (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• MLT 141 - Immunohematology/Immunology (4 Cr.)	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• MLT 142 - Urinalysis (2 Cr.)	2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• MLT 180 - Internship I / Blood Banking (1 Cr.)	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• MLT 182 - Internship II /Hematology, Coagulation & Urinalysis (5 Cr.)	5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• MLT 231 - Clinical Microbiology (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• MLT 232 - Parasitology/Mycology (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• MLT 241 - Clinical Chemistry I (2 Cr.)	2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• MLT 242 - Clinical Chemistry II (4 Cr.)	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• MLT 253 - Seminar/Comprehensive Exams (1 Cr.)	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



63 Credits

Catalog Year: 2021/2022

• MLT 280 - Internship III /Clinical Chemistry (5 Cr.)	5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• MLT 282 - Internship IV / Microbiology (2 Cr.)	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Pre-Requisites, Co-Requisites, and Recommendations (grade C or better required)**

Where requirements are listed as course categories (e.g. Electives, Arts/Humanities) rather than as specific courses, please note that depending upon course choice, pre-requisites may be required.

BIO 201 - Human Anatomy and Physiology I with Lab: GT-SC1\* (4 Cr.)

- Pre-Requisite: BIO 111 - General College Biology I with Lab: GT-SC1 OR Score of 75+ on Biology Placement Test

BIO 202 - Human Anatomy and Physiology II with Lab: GT-SC1 (4 Cr.)

- Pre-Requisite: BIO 201 - Human Anatomy and Physiology I with Lab: GT-SC1

CIS 118 - Intro to PC Applications (3 Cr.)

- Requirement: Students must have Windows file management skills to create file folders, rename files, delete files, copy and move files

MLT 132 - Hematology II (4 Cr.)

- Pre-Requisite OR Co-Requisite: BIO 201 - Human Anatomy and Physiology GT SCI OR BIO 106 - Basic Human Anatomy and Physiology
- Pre-Requisite: MLT 131 - Hematology I

MLT 141 - Immunohematology/Immunology (4 Cr.)

- Co-Requisite: BIO 202 - Human Anatomy and Physiology II with Lab: GT-SC1
- Pre-Requisite: BIO 201 - Human Anatomy and Physiology GT SCI OR BIO 106 - Basic Human Anatomy and Physiology
- Pre-Requisite: MLT 131 - Hematology I
- Pre-Requisite: MLT 132 - Hematology II

MLT 180 - Internship I / Blood Banking (1 Cr.)

- Pre-Requisite: MLT 141 - Immunohematology/Immunology

MLT 182 - Internship II /Hematology, Coagulation & Urinalysis (5 Cr.)

- Pre-Requisite: MLT 131 - Hematology I
- Pre-Requisite: MLT 132 - Hematology II
- Pre-Requisite: MLT 142 - Urinalysis

MLT 231 - Clinical Microbiology (4 Cr.)

- Co-Requisite: MLT 232 - Parasitology/Mycology
- Pre-Requisite: BIO 201 - Human Anatomy and Physiology GT SCI OR BIO 202 - Human Anatomy and Physiology II with Lab: GT-SC1

MLT 232 - Parasitology/Mycology (2 Cr.)

- Co-Requisite: MLT 231 - Clinical Microbiology
- Pre-Requisite: BIO 201 - Human Anatomy and Physiology GT SCI OR BIO 202 - Human Anatomy and Physiology II with Lab: GT-SC1

MLT 242 - Clinical Chemistry II (4 Cr.)

- Pre-Requisite OR Co-Requisite: MLT 241 - Clinical Chemistry I
- Pre-Requisite: CHE 101 - Introduction to Chemistry I w/Lab OR CHE 111 - General College Chemistry I with Lab: GT-SC1

MLT 280 - Internship III /Clinical Chemistry (5 Cr.)

- Pre-Requisite: MLT 241 - Clinical Chemistry I
- Pre-Requisite: MLT 242 - Clinical Chemistry II

MLT 282 - Internship IV / Microbiology (2 Cr.)

- Pre-Requisite: MLT 231 - Clinical Microbiology
- Pre-Requisite: MLT 232 - Parasitology/Mycology

ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1\*

- Co-Requisite: CCR 094 - Studio 121

### Program Outcomes

- Demonstrate entry-level Medical Laboratory Technology skills in the following clinical laboratory areas: Blood Bank, Chemistry, Hematology, Immunology, Microbiology, Urinalysis/Body Fluids and Laboratory Operations.
- Display professional laboratory safety procedures.
- Communicate and collaborate within a medical laboratory setting.

### Notes

- \*This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.
- AAA 101 – College 101: Student Experience is required for all new college students seeking degrees or transfer.
- Course availability is subject to change.
- Fast Track Program: The one-year Fast-Track program is available for students who have all General Education courses completed prior to enrolling in any MLT courses.
- In order to meet program requirements, students registered for ENG 121 or ENG 131 must also register for CCR 094 unless they can demonstrate otherwise meeting the CCR 094 standard through assessment testing, prior college coursework, or recent High School coursework. See an Advisor for details.
- Recommended courses may be listed above for certain electives; consult with the Academic Advising Office ([advising@arapahoe.edu](mailto:advising@arapahoe.edu) or 303.797.5664) for additional elective recommendations.
- Refer to 2021/2022 catalog for specific requirements and important information about this degree.

### Graduation Requirements

- All courses must be completed with a grade of "C" or better.
- All MLT courses must have been completed within five years of graduation.
- BIO 201 and BIO 202 must have been completed within ten years of graduation.
- CIS 118 must have been completed within six years of graduation.
- To graduate, students must apply for graduation (form available at [www.arapahoe.edu/departments-and-programs/graduation](http://www.arapahoe.edu/departments-and-programs/graduation)) by the deadline and meet all degree requirements.

RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

Year 1: Fall	Credits	Course
	4	BIO 201 - Human Anatomy and Physiology I with Lab: GT-SC1 (4 Cr.)
	3	HPR 144 - Comprehensive Medical Terminology (3 Cr.)
	2	MLT 131 - Hematology I (2 Cr.)
	4	MLT 132 - Hematology II (4 Cr.)
Year 1: Spring	Credits	Course
	4	BIO 202 - Human Anatomy and Physiology II with Lab: GT-SC1 (4 Cr.)
	3	COM 115 - Public Speaking OR COM 125 - Interpersonal Communication (3 Cr.)
	4	MLT 141 - Immunohematology/Immunology (4 Cr.)
	2	MLT 142 - Urinalysis (2 Cr.)
Year 1: Summer	Credits	Course
	1	MLT 180 - Internship I / Blood Banking (1 Cr.)
	5	MLT 182 - Internship II /Hematology, Coagulation & Urinalysis (5 Cr.)
Year 2: Fall	Credits	Course
	5	CHE 101 - Introduction to Chemistry I w/Lab OR CHE 111 General College Chemistry w/Lab
	3	ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1
	4	MLT 231 - Clinical Microbiology (4 Cr.)
	2	MLT 232 - Parasitology/Mycology (2 Cr.)
Year 2: Spring	Credits	Course
	3	CIS 118 - Intro to PC Applications (3 Cr.)
	2	MLT 241 - Clinical Chemistry I (2 Cr.)
	4	MLT 242 - Clinical Chemistry II (4 Cr.)
Year 2: Summer	Credits	Course
	1	MLT 253 - Seminar/Comprehensive Exams (1 Cr.)
	5	MLT 280 - Internship III /Clinical Chemistry (5 Cr.)
	2	MLT 282 - Internship IV / Microbiology (2 Cr.)

RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

Year 1: Fall	Credits	Course
	2	MLT 131 - Hematology I (2 Cr.)
	4	MLT 132 - Hematology II (4 Cr.)
	4	MLT 231 - Clinical Microbiology (4 Cr.)
	2	MLT 232 - Parasitology/Mycology (2 Cr.)
Year 1: Spring	Credits	Course
	4	MLT 141 - Immunohematology/Immunology (4 Cr.)
	2	MLT 142 - Urinalysis (2 Cr.)
	2	MLT 241 - Clinical Chemistry I (2 Cr.)
	4	MLT 242 - Clinical Chemistry II (4 Cr.)
Year 1: Summer	Credits	Course
	1	MLT 180 - Internship I / Blood Banking (1 Cr.)
	5	MLT 182 - Internship II /Hematology, Coagulation & Urinalysis (5 Cr.)
	1	MLT 253 - Seminar/Comprehensive Exams (1 Cr.)
	5	MLT 280 - Internship III /Clinical Chemistry (5 Cr.)
	2	MLT 282 - Internship IV / Microbiology (2 Cr.)