

# Medical Laboratory Technician – AS (Associates GE Track)

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*+If you have completed coursework at another college and/or are starting in a semester other than a Fall term, please follow up with the Counseling Department to determine if this sequence is appropriate for your academic and career goals.*

**Program Description:** The Medical Laboratory Technician Program is accredited by the National Accrediting Agency for Clinical Laboratory Science. The Medical Laboratory Technology Associate Degree program prepares students for employment in clinical laboratories, industry and biotechnology. The MLT Program curriculum, an integration of classroom lectures, student laboratories and clinical training, fosters development of analytical and problem-solving skills required in this profession.

**PREREQUISITES** – completed with minimum 2.50 GPA

1. Anatomy (4 semester or 6 quarter units)
2. Physiology (4 semester or 6 quarter units)
3. Microbiology (4 semester or 6 quarter units)
4. Preparatory General Chemistry (4 semester or 6 quarter units)

Completing program prerequisites does not assure admission into the program.

## **RECOMMENDED PREPARATION**

ENGL-101 or ENGL-101H. It is highly recommended that students be proficient in both the written and oral English language prior to enrolling in the program or, at the very least, prior to enrolling in the clinical practicum courses and training at the clinical laboratory sites.

## **APPLICATION PROCEDURE:**

1. Submit College of the Canyons application and obtain a student identification number.
2. Submit the following documents to Admissions and Records:
  - Official sealed transcripts from all colleges attended, except COC (must include all coursework regardless if MLT prerequisite or not)
  - For transcripts from other countries, an official sealed foreign transcript evaluation from a NACES-approved agency
  - Official College Board AP English score
  - A copy of high school transcript, copy of diploma, OR copy of GED certificate
  - Students with transcripts evaluated by ACCRAO should contact the Mathematics, Sciences, and Health Professions office for assistance.
3. Submit Online MLT Program Application on the Mathematics, Sciences, and Health Professions website. Evidence of completion of Phlebotomy, specifically a copy of a California Department of Public Health/ Lab Field Services issued Certified Phlebotomy Technician (CPT-1) license, must be attached to the application. If not completed at the time of the application, the phlebotomy course will be offered within the MLT program. A valid COC email address is required.
4. The MLT application and official transcripts will be evaluated to determine if applicant meets current MLT Program selection criteria. Applicants will not be eligible for selection if admission requirements are not met.
5. Selected applicants must attend and complete the mandatory program orientation or they will be dropped from the program.

## **Mandatory Requirements of all Medical Lab Technician (MLT) Students:**

Once admitted to the MLT Program, students are required to complete lab experiences at affiliated hospitals and clinical labs. Students must have their own means of transportation to these off-campus sites. These facilities have requirements above and beyond the requirements of being a student on a community college campus. All students entering the program must complete the following in order to participate in program activities:

- Current Physical
- Current TB clearance – Two-Step Process or Chest Xray
- Color Blindness Screening – for accommodation purposes only
- Immunizations and Titers
- Drug Screening
- Current CPR card
- Current Fire Life Safety Card
- Malpractice Insurance
- Background Check and OIG/GSA Clearance – any student with questions about background checks should contact the Mathematics, Sciences, and Health Professions office for a confidential opportunity to discuss this based on healthcare setting requirements about background clearances
- Hepatitis B Video
- ID Badge

If these mandatory requirements are not met, the student will be blocked from registration for the MLT courses and dropped from the program.

Additional details and information about these requirements will be provided to students upon acceptance to the program. Students who have questions prior to applying to the program may contact the Mathematics, Sciences, and Health Professions office for assistance.

**Program SLO:** Students will be able to demonstrate proficiency in the core skills and knowledge required for employment as a medical laboratory technician.

***Important Transfer Information:*** The sequence listed below, may not meet all your transfer admissions requirements. Connect with a counselor to develop an individual student education plan through the Counseling Department @ <https://www.canyons.edu/counseling> or (661) 362-3288/(661) 362-3811.

Major courses are sequenced and **BOLDED** based on recommendations by the [Medical Laboratory Technician Department](#)

**First Semester (3-13 units minimum) FA = Fall; WI = Winter; SP = Spring; SU = Summer**

Course	Title	Units	Major and GE Courses
BIOSCI 100/100H	General Biology (FA, WI, SP, SU)	3	Pre-requisite for MLT Sciences and GE Area A
ENGLISH 101/101H	English Composition (FA, WI, SP, SU)	4	Area Di
*Math Competency – Department Recommends MATH 102 OR MATH 140	Choose one course from the AA GE Area 3 (FA, WI, SP, SU) – Department Recommends Trigonometry (FA, WI, SP, SU) or Introductory Statistics (FA, WI, SP, SU)	3-5	Area 3 and Dii
*Social Science and Diversity – Department Recommends SOCI 101	Choose one course from the AA GE Area B (FA, WI, SP, SU) – Department Recommends Introduction to Sociology (FA, WI, SP, SU)	3	Area B and 4 -Diversity
<b>Term Total:</b>		<b>13-15</b>	

Check the [Honors](#) website for most recent course offerings. Must be enrolled in the Honors program to take courses, see below.

\*Student interested in pursuing the Clinical Lab Science BS Degree through CSUDH will need MATH 140- Statistics. Additional STEM Math courses may be required for other programs. Consult with a counselor for more information based on your transfer goals.

\*\*Consider taking a Social Science GE Area B course with an (\*) indication on the [Associate Degree Requirements Checklist](#). Courses with an (\*) will also meet the GE Diversity Requirement. Refer to the Associate Degree Checklist for details.

**Second Semester (14-26 units minimum)**

Course	Title	Units	Major and GE Courses
<b>**BIOSCI 201 OR BIOSCI 202 OR BIOSCI 204</b>	<b>Select one of the Anatomy &amp; Physiology Sequences: Introduction to Human Anatomy (FA, SP, SU) OR Introduction to Human Physiology (FA, SP, SU) OR Human Anatomy and Physiology I (FA, SP, SU)</b>	<b>4</b>	<b>Major and MLT Pre-requisite</b>

Course	Title	Units	Major and GE Courses
<b>CHEM 151/151H</b>	<b>Introductory Chemistry (FA, WI, SP, SU)</b>	<b>4</b>	<b>MLT Pre-requisite</b>
PE/Wellness	Take two PE or Dance activity courses (excluding DANCE 100) or Health Science 100, 149, 150, or 243 (FA, WI, SP, SU)	2-3	Area F
American Institutions – Choose Option I or II	Complete first course in chosen option – (note: must take both classes within one option) (FA, WI, SP, SU) – <i>see table below</i>	3	American Institutions
<b>Term Total:</b>		<b>13-14</b>	

**NOTE: BIOSCI 100 is the pre-requisite for BIOSCI 201, 202 and 204.**

**\*\*Students need 8 units of Anatomy & Physiology and may select among either the BIOSCI 201 (Introduction to Human Anatomy) AND BIOSCI 202 (Introduction to Human Physiology) Sequence OR the BIOSCI 204 (Human Anatomy and Physiology I) AND BIOSCI 205 (Human Anatomy and Physiology II) Sequence.**

### Third Semester (27-41 units minimum)

Course	Title	Units	Major and GE Courses
<b>BIOSCI 201 OR BIOSCI 202 OR BIOSCI 205</b>	<b>Continue with the Anatomy &amp; Physiology Sequence: Introduction to Human Anatomy (FA, SP, SU) OR Introduction to Human Physiology (FA, SP, SU) OR Human Anatomy and Physiology II (FA, SP, SU)</b>	<b>4</b>	<b>Major and MLT Pre-requisite</b>
<b>BIOSCI 221</b>	<b>Introduction to Microbiology (FA, SP, SU)</b>	<b>5</b>	<b>Major and MLT Pre-requisite</b>
Humanities and Fine Arts	Choose one course from the AA GE Area C (FA, WI, SP, SU)	3	Area C
American Institutions	Complete second course in chosen option – (note: must take both classes within one option) – <i>see table below</i>	3	American Institutions
<b>Term Total:</b>		<b>15</b>	

**NOTE: BIOSCI 204 is a pre-requisite for BIOSCI 205 and BIOSCI 100 AND CHEM 151 are pre-requisites for BIOSCI 221 – Microbiology.**

Upon completion of all MLT pre-requisites, students must submit their MLT Program Application for admission. Applications are accepted once a year for subsequent fall semester. Check website for exact dates:

<https://www.canyons.edu/academics/mlt/prospective/application.php>. Students are encouraged to attend an [MLT Program Information Session](#) prior to learn more about the program and admission and selection criteria.

### Summer Intersession (42-44.5 units minimum)

Course	Title	Units	Major and GE Courses
<b>MLT 050</b>	<b>Phlebotomy (SU)</b>	<b>3.5</b>	<b>Major</b>
<b>Term Total:</b>		<b>3.5</b>	

\*MLT 050 will be required if you are not yet Phlebotomy Certified with a California Department of Public Health/ Lab Field Services issued Certified Phlebotomy Technician-1 license. Priority is given to students admitted into the MLT program. Completion of the MLT 050 course or submission of a CDPH/LFS issued CPT-1 license (non-expired) is required before proceeding to the sixth and seventh semesters of the program.

### Fourth Semester - 1<sup>st</sup> term (Fall) in MLT courses once admitted to the program (45.5-55.5 units minimum)

Course	Title	Units	Major and GE Courses
<b>MLT 110</b>	<b>Clinical Hematology Lecture (FA)</b>	<b>3</b>	<b>Major</b>
<b>MLT 110L</b>	<b>Clinical Hematology Lab (FA)</b>	<b>1</b>	<b>Major</b>
<b>MLT 120</b>	<b>Clinical Chemistry I Lecture (FA)</b>	<b>3</b>	<b>Major</b>
<b>MLT 120L</b>	<b>Clinical Chemistry I Lab (FA)</b>	<b>1</b>	<b>Major</b>
<b>MLT 112</b>	<b>Clinical Urinalysis Lecture (FA)</b>	<b>1</b>	<b>Major</b>
<b>MLT 112L</b>	<b>Clinical Urinalysis Lab (FA)</b>	<b>0.5</b>	<b>Major</b>
<b>MLT 114</b>	<b>Clinical Coagulation Lecture (FA)</b>	<b>1</b>	<b>Major</b>
<b>MLT 114L</b>	<b>Clinical Coagulation Lab (FA)</b>	<b>0.5</b>	<b>Major</b>
<b>Term Total:</b>		<b>11</b>	

**Fifth Semester –2<sup>nd</sup> term (Spring) in MLT courses once admitted to the program (56.5-67.5 units minimum)**

Course	Title	Units	Major and GE Courses
MLT 116	Clinical Microbiology Lecture (SP)	3	Major
MLT 116L	Clinical Microbiology Lab (SP)	1	Major
MLT 118	Clinical Immunology/Immunoematology Lecture (SP)	3	Major
MLT 118L	Clinical Immunology/Immunoematology Lab (SP)	1	Major
MLT 124	Clinical Chemistry II Lecture (SP)	3	Major
MLT 124L	Clinical Chemistry II Lab (SP)	1	Major
<b>Term Total:</b>		<b>12</b>	

**Sixth Semester – 3<sup>rd</sup> term (Fall) in MLT courses once admitted to the program (68.5-75.5 units minimum):**

Course	Title	Units	Major and GE Courses
MLT 128	Clinical Hematology/Urinalysis/ Coagulation Practicum (FA)	4	Major
MLT 131	Clinical Chemistry Practicum (FA)	4	Major
<b>Term Total:</b>		<b>8</b>	

**Seventh Semester - 4<sup>th</sup> term (Spring) in MLT courses once admitted to the program (76.5-82.5units minimum)**

Course	Title	Units	Major and GE Courses
MLT 129	Clinical Microbiology Practicum (SP)	4	Major
MLT 130	Clinical Immunology/Immunoematology Practicum (SP)	3	Major
<b>Term Total:</b>		<b>7</b>	

**Total Units: 82.5+****American Institutions Requirement** – Select one of the options below and complete a total of 6 units

<b>Option I</b>	One course from the following: Economics 170/170H, History 111/111H, History 112/112H, History 120/120H, or History 130 AND Political Science 150/150H (FA, WI, SP, SU)
<b>Option II</b>	History 111/111H AND History 112/112H (FA, WI, SP, SU)

**Counseling Resources**Medical Laboratory Technician Department: <https://www.canyons.edu/academics/mlt/>Counseling Department: <https://www.canyons.edu/student-services/counseling/>

Associate Degree GE Requirements:

<https://www.canyons.edu/student-services/counseling/degrees/generaled.php> Alpha Delta Nu Nursing HonorCampus Alliances: <https://www.canyons.edu/administration/ie2/equity/alliances.php>Petition for Associate Degree: Check the [student calendar](#) for term-specific submission deadlines. Summer graduation associate degree petitions are due by April 1st for your name to appear in the spring commencement pamphlet. The petition form must be reviewed with a counselor and may be found here:[https://www.canyons.edu/resources/documents/student-services/admissions/Petition\\_for\\_Associate\\_Degree\\_and\\_Certificate\\_of\\_Achievement.pdf](https://www.canyons.edu/resources/documents/student-services/admissions/Petition_for_Associate_Degree_and_Certificate_of_Achievement.pdf)**Career Resources**Medical Laboratory Technician Career Tree: <https://www.canyons.edu/academics/mlt/careertree/index.php>California Career Zone: <https://www.cacareerzone.org/>O\*Net Online: <https://www.onetonline.org/>Bureau of Labor and Statistics: [www.bls.gov](http://www.bls.gov)**Professional Associations:**American Society of Clinical Pathologists (ASCP) [www.ascp.org](http://www.ascp.org)National Accreditation Agency for Clinical Laboratory Sciences (NAACLS) <https://naaccls.org/>California Association for Medical Laboratory Technology (CAMLT) [www.camlt.org](http://www.camlt.org)