

Associate of Applied Science in Medical Laboratory Technology

The National Accrediting Agency for Clinical Laboratory Sciences provides the following description: At career entry, the medical laboratory technician will be able to perform routine clinical laboratory tests (such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular and other emerging diagnostics) as the primary analyst making specimen-oriented decisions on predetermined criteria, including a working knowledge of critical values. Communication skills will extend to frequent interactions with members of the health care team, external relations, customer service and patient education. The level of analysis ranges from waived and point-of-care testing to complex testing encompassing all major areas of the clinical laboratory. The medical laboratory technician will have diverse functions in areas of pre-analytical, analytical and post-analytical processes. The medical laboratory technician will have responsibilities for information processing, training and quality control monitoring wherever clinical laboratory testing is performed.

Upon graduation and initial employment, the medical laboratory technician should be able to demonstrate entry-level competencies in the above areas of professional practice. Graduates are eligible to sit for national certification examinations in medical laboratory technology.

Admission Requirements

Students who apply to the associate of applied science medical laboratory technology major and who qualify for admission to UAA at the associate level are admitted as pre-medical laboratory technology majors. Admission as a pre-medical laboratory technology major does not guarantee admission to the program. There are a limited number of seats available in each MEDT course. The process for advancement to the full major and the formal admission to the medical laboratory technology major are:

1. Satisfy the Application and Admission Requirements for Associate of Applied Science Programs (<https://catalog.uaa.alaska.edu/undergraduateprograms>).
2. Accepted by UAA as pre-medical laboratory technology major with official transcript evaluations (if any) completed by Enrollment Services.
3. Meet with a medical laboratory science advisor regarding application, program admission and development of a program of study.
4. Completion of specified prerequisite courses or equivalent transfer courses with a grade of C or better; grades received for courses repeated more than once will not be considered in the application process.

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4

BIOL A112	Human Anatomy and Physiology II	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
or CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4-7
or CHEM A106 & A106L & CHEM A321	General Chemistry II and General Chemistry II Laboratory and Organic Chemistry I	
MEDT A132 & A132L	Phlebotomy and Specimen Processing Techniques and Phlebotomy and Specimen Processing Techniques Lab	4
MEDT A133	Basic Techniques in Laboratory Medicine	2
MEDT A134	Immunology and Serology	3

5. Minimum overall grade point average (GPA) of 2.5.
5. Complete the General Admission Requirements (<https://catalog.uaa.alaska.edu/undergraduateprograms/coh/medicallaboratoryscience>) for the Medical Laboratory Science Department.
6. Upon completion of specified prerequisites and general admission requirements, submit a change of major form for the full major to the Medical Laboratory Science Department.
7. Applicants meeting the criteria described above will be ranked according to extracted science GPA, which includes specified biology, chemistry and MEDT A132/L, MEDT A133 and MEDT A134 prerequisites. The number of applicants accepted into the full major will be dependent on the number of seats available in the 200-level MEDT courses. Students not accepted into the full major may reapply.

Academic Requirements

In order to progress within the Associate of Applied Science in Medical Laboratory Technology program, students must earn a minimum grade of C or P in all Medical Laboratory Science (MEDT) courses required for the degree and demonstrate professional behavior as defined by the Medical Laboratory Science Department Core Abilities and associated behavior criteria. Satisfactory progress is demonstrated by exhibiting developing level criteria by the end of the second year (assessed by core faculty), and entry level criteria by the end of the clinical practicum (assessed by clinical instructors). Students must receive a score of 3 or higher on the developing level criteria in order to progress in the program and demonstrate the critical core abilities during clinical practicum in order to graduate from the program. Students who are unable to earn an acceptable grade in a MEDT course during their initial

enrollment may attempt to earn a satisfactory grade one additional time on a space available basis.

When the number of students admitted to the program exceeds the number that can be accommodated in the clinical practicum, students are placed on an alternate list and informed they can complete their practicum should space become available, or they are given preference for a subsequent semester. Students receive a letter stating they are an alternate; students must sign and return the letter acknowledging alternate status. UAA is affiliated with clinical sites throughout the state of Alaska. Students training at clinical sites outside of Anchorage may incur additional costs related to travel and housing. The practicum coordinator will ask for volunteers to train outside of Anchorage. If there are no volunteers, students may be assigned placement. Students with higher GPAs in MEDT courses will have first preference for location. If a student is unable or unwilling to go outside of Anchorage, they will be placed on the alternate list and given preference for a subsequent semester.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (<http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements>).
- Complete the General Course Requirements for Associate of Applied Science Degrees (<http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements/generalcourserequirements>). Required support courses below may be used to fulfill AAS General Course Requirements.
- Complete the Required Support Courses and the Program Requirements listed below with a minimum grade of C or P.

Required Support Courses

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
or CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4-7
or CHEM A106 & A106L & CHEM A321	General Chemistry II and General Chemistry II Laboratory and Organic Chemistry I	
WRTG A212	Writing and the Professions	3
or WRTG A213	Writing and the Sciences	
Total Credits		19-22

Program Requirements

Code	Title	Credits
MEDT A132 & A132L	Phlebotomy and Specimen Processing Techniques and Phlebotomy and Specimen Processing Techniques Lab	4
MEDT A133	Basic Techniques in Laboratory Medicine	2
MEDT A134	Immunology and Serology	3
MEDT A202	Clinical Chemistry	4
MEDT A203	Clinical Microbiology	6
MEDT A204	Hematology and Coagulation	6
MEDT A208	Urine and Body Fluid Analysis	3
MEDT A211	Blood Banking	4
MEDT A250	Cultural Diversity in Health Care	1
MEDT A395	Medical Laboratory Technology Practicum	12
Total Credits		45

A minimum of 70 credits is required for the degree.

Program Student Learning Outcomes

The specific educational outcomes for the program are to produce graduates who:

- Demonstrate entry-level competencies for medical laboratory technicians in the following disciplines: hematology, chemistry, immunology, blood bank, urine and body fluid analysis, microbiology, and laboratory operations.
- Demonstrate professional behavior including sound work ethics, cultural responsiveness and appearance while interacting with patients and health care professionals.
- Demonstrate continuing competency through certification maintenance.
- Demonstrate a commitment to the laboratory profession through active involvement in a professional organization.