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.

The medical laboratory technician performs testing in urinalysis, hematology, microbiology, transfusion services, and clinical chemistry. This provides valuable patient information to assist in medical diagnosis and treatment. The medical laboratory technology program prepares students to become skilled members of the healthcare team.

The Associate of Applied Science (AAS) in Medical Laboratory Technology is accredited through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The AAS in Medical Laboratory Technology articulates with the Bachelor of Science (BS) in Medical Laboratory Science.

Admission Requirements

- Complete the Admission Requirements for Associate Degrees (http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate/).
- Complete, or be in the progress of completing, the following courses with a minimum grade of C within two attempts:
  - BIOL A111
  - BIOL A111L
  - BIOL A112
  - BIOL A112L
  - CHEM A103
  - CHEM A103L
  - CHEM A105
  - CHEM A105L
  - CHEM A104
  - CHEM A104L
  - CHEM A106
  - CHEM A106L

- Submit documentation of a minimum cumulative GPA of 2.50 including all transfer coursework
- Submit a medical laboratory technology application according to instructions and deadlines on the program website (https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/medical-laboratory-science/)
- All students will initially be admitted to a pre-major status. Admission to the pre-major status does not guarantee subsequent admission to the major. As a pre-major, students work with an advisor to assist them in completing pre-major requirements and preparing to apply to the full major.

Special Considerations

Prior to beginning practicum courses, students must provide documentation of:

- The following immunizations: Hepatitis B titer showing immunity, Hepatitis A, MMR, Tdap, Varicella, Influenza vaccine within the previous twelve months, and two-step PPD test or Quantiferon Gold
- Current Basic Life Support certification
- State of Alaska Background Check
- Current health insurance (must be maintained throughout time in practicum)

Practicum sites may establish additional requirements including, but not limited to, drug screening and health physicals.

Graduation Requirements

- Complete the General University Requirements for Associate of Applied Science Degrees (http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements/).
- Complete the General Education Requirements for Associate of Applied Science Degrees (http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements/genreeducations/).
- For the Quantitative Skills requirement, MATH A105 or higher is recommended.
- Complete the following major requirements with a minimum grade of C:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<td>BIOL A111 &amp; A111L</td>
<td>Human Anatomy and Physiology I and Human Anatomy and Physiology I Lab</td>
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<tr>
<td>BIOL A112 &amp; A112L</td>
<td>Human Anatomy and Physiology II and Human Anatomy and Physiology II Lab</td>
<td>4</td>
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<tr>
<td>CHEM A103 &amp; A103L</td>
<td>Introduction to General Chemistry and Introduction to General Chemistry Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM A105 &amp; A105L</td>
<td>General Chemistry I and General Chemistry I Laboratory</td>
<td>-</td>
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</tbody>
</table>
# Associate of Applied Science in Medical Laboratory Technology

- **CHEM A104 & A104L**: Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory  
- 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>MEDT A133</td>
<td>Basic Techniques in Laboratory Medicine</td>
<td>2</td>
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<td>MEDT A134</td>
<td>Immunology and Serology</td>
<td>3</td>
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<td>MEDT A202</td>
<td>Clinical Chemistry</td>
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<td>MEDT A203</td>
<td>Clinical Microbiology</td>
<td>6</td>
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<tr>
<td>MEDT A204</td>
<td>Hematology and Coagulation</td>
<td>6</td>
</tr>
<tr>
<td>MEDT A208</td>
<td>Urine and Body Fluid Analysis</td>
<td>3</td>
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<td>MEDT A211</td>
<td>Blood Banking</td>
<td>4</td>
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<td>MEDT A250</td>
<td>Cultural Diversity in Health Care</td>
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<tr>
<td>MEDT A395</td>
<td>Medical Laboratory Technology Practicum</td>
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</table>

**Total**: 61-64

A minimum of 73 credits is required for the degree.

## Program Student Learning Outcomes

At career entry, the medical laboratory technician as part of the healthcare team, will be able to:

- Perform routine clinical laboratory tests in the area of urinalysis, hematology, clinical chemistry, transfusion services, and microbiology
- Demonstrate professional and communication skills to support interaction with members of the medical team, customer service, patient care and education
- Demonstrate safety standards according to Occupational Safety and Health Administration, American Association of Blood Banks, American Society for Clinical Pathology and Clinical Laboratory Improvement Amendments
- Demonstrate ethical behavior in the hospital or clinical settings.