Medical Laboratory Science, B.S.

The Carver College of Medicine partners with Allen College in Waterloo, Iowa, to offer the major in medical laboratory science. The program is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences. All graduates are eligible for national certification examinations in medical laboratory science.

Undergraduate study in medical laboratory science is guided by the academic rules and procedures outlined in the Carver College of Medicine section of the Catalog. Because the Carver College of Medicine partners with Allen College for the medical laboratory science major, students are not held to the University of Iowa in-residence requirement.

Expenses

Students are responsible for buying textbooks and paying tuition and student fees. The Medical Laboratory Science Program provides laboratory coats for professional program students.

Requirements

The Bachelor of Science with a major in medical laboratory science requires a minimum of 124 s.h., including 84 s.h. of preparatory study and 40 s.h. in the professional (clinical) program, which consists of 11 months of didactic and practical instruction and clinical rotations. Students must maintain a cumulative g.p.a. of at least 2.70 in all courses for the major and in all University of Iowa courses. They also must complete the College of Liberal Arts and Sciences GE CLAS Core.

Bachelor of Science students who have completed all preparatory study (years one through three) begin the fourth-year professional program in late May with online didactic lectures. They attend several days of laboratory skills instruction on the Allen College campus, and in mid-November they begin a series of clinical rotations in the laboratories of University of Iowa Hospitals & Clinics and the Iowa City VA Health Care System. The first series ends at the end of the calendar year. January through early April involve more online courses and student laboratory skills. The last series of clinical rotations begin in mid-April and the professional program concludes with exams in preparation for national certification. Students who successfully complete the 11-month professional program graduate with a Bachelor of Science in medical laboratory science from the University of Iowa and a Bachelor of Health Science from Allen College.

Professional program requirements are taken through Allen College. To learn more about the professional program, visit Medical Laboratory Science (MLS) on the Allen College website.

As part of their preparatory study, students must complete specific courses that are prerequisites for admission to the major.

Preparatory Study: Prerequisites for Admission to the Major

Students must complete the following course work before they may be admitted to the major in medical laboratory science. Students must earn a grade of C-minus or higher in all prerequisite courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL:1411</td>
<td>Foundations of Biology - Diversity of Form and Function</td>
<td>8</td>
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<tr>
<td>BIOL:1412</td>
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<td>CHEM:1110</td>
<td>Principles of Chemistry I-II</td>
<td>8</td>
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<td>CHEM:1120</td>
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<td>CHEM:2210</td>
<td>Organic Chemistry I</td>
<td>3</td>
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<td>MICR:2157</td>
<td>General Microbiology</td>
<td>5</td>
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<tr>
<td>MICR:2158</td>
<td>General Microbiology Laboratory</td>
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<tr>
<td>PSY:1001</td>
<td>Elementary Psychology</td>
<td>3</td>
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<tr>
<td>RHET:1030</td>
<td>Rhetoric</td>
<td>4-5</td>
</tr>
<tr>
<td>SOC:1010</td>
<td>Introduction to Sociology</td>
<td>3-4</td>
</tr>
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</table>

One of these options:

- HHP:1100 & HHP:1110 Human Anatomy - Human Anatomy Laboratory (both courses) 4
- HHP:1150 Human Anatomy Lecture with Lab 4
- HHP:1300 & HHP:1310 Fundamentals of Human Physiology - Human Physiology Laboratory (both courses) 4
- HHP:1350 Fundamentals of Human Physiology with Laboratory 4
- HHP:3115 Anatomy for Human Physiology with Lab 5
- HHP:3550 Human Physiology with Laboratory 5

One of these:

- BIOL:3110 Biochemistry 3
- CHEM:2220 Organic Chemistry II 3

One of these:

- MATH:1005 College Algebra 4
- MATH:1020 Elementary Functions 4
- MATH:1440 Mathematics for the Biological Sciences 4

One of these:

- STAT:1020/PSQF:1020 Elementary Statistics and Inference 3
- STAT:3510/IGPI:3510 Biostatistics 3

Fourth Year: Professional Program

Students must successfully complete the professional program requirements through Allen College in order to graduate with the B.S. degree in medical laboratory science.

Admission

Admission to the medical laboratory science professional program (fourth year) is competitive; enrollment may be limited. Applications are accepted beginning in October and ending in February. Applicant review and admission continues on a monthly basis until the program is full. Students must apply to Allen College. Most students apply during fall of their
third year and begin the professional program in late May immediately after their third year.

Before beginning the professional program, students must complete all prerequisites, including the College of Liberal Arts and Sciences GE CLAS Core requirements, and must earn at least 84 s.h. of college credit. They satisfy the English and public speaking prerequisite requirements by fulfilling the GE CLAS Core Rhetoric requirement. Applicants must have a cumulative g.p.a. of at least 2.70 both overall and in science course work. They must satisfy any English as a Second Language (ESL) requirements specified by the University of Iowa before beginning the professional program.

Students should consult with a Medical Laboratory Science Program advisor as early as possible to plan preclinical studies that meet all requirements.

**Career Advancement**

The demand for medical laboratory scientists (MLS) is much greater than the number of people qualified to fill the positions, so MLS graduates have numerous employment opportunities nationwide. They consistently find employment before or very soon after graduation.

Opportunities for advancement include positions such as lab manager, computer specialist, technical specialist, or sales/instrument representative. An advanced degree in basic sciences, medicine, hospital administration, or business can expand earning potential.

Graduates often enjoy diverse work environments, including labs in hospitals, research institutions, public health facilities, forensic units, pharmaceutical companies, or working in the armed forces. They have an impact in the field as integral members of health care teams, providing information essential for the treatment and prevention of disease.

The Pomerantz Career Center offers multiple resources to help students find internships and jobs.