

# MEDICAL LABORATORY SCIENCES, MASTER OF SCIENCE (M.S.) WITH A CONCENTRATION IN PUBLIC HEALTH LABORATORY SCIENCES

## Program goals

The Department of Medical Laboratory Sciences provides students with advanced theoretical and technical education and prepares them to assume roles as laboratory supervisors, educators and researchers. VCU will provide students with a superior, yet flexible, course of advanced study in medical laboratory sciences.

## Student learning outcomes

### Medical laboratory sciences core outcomes

1. Students will demonstrate the ability to research and evaluate laboratory issues within medical laboratory sciences, formulate a research question, design a research protocol and complete a research project.
2. Students will demonstrate appropriate professional conduct and leadership characteristics to include effective communication skills, ethical conduct and problem-solving abilities.

### Public health laboratory sciences concentration-specific outcomes

1. Students will be able to describe fundamentals of infectious epidemiology in a public health laboratory setting (e.g., basic epidemiology, health literacy, informatics).
2. Students will develop skills in molecular techniques and advanced instrumentation utilized in the public health laboratory.
3. Students will be able to describe fundamentals and application of quality management systems.

## VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs

The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the **Graduate School website** and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

**Visit the academic regulations section for additional information on academic regulations for graduate students.**

## Degree candidacy requirements

A graduate student admitted to a program or concentration requiring a final research project, work of art, thesis or dissertation, must qualify for continuing master's or doctoral status according to the degree candidacy requirements of the student's graduate program. Admission to degree candidacy, if applicable, is a formal statement by the graduate student's faculty regarding the student's academic achievements and the student's readiness to proceed to the final research phase of the degree program.

Graduate students and program directors should refer to the following degree candidacy policy as published in the VCU Graduate Bulletin for complete information and instructions.

**Visit the academic regulations section for additional information on degree candidacy requirements.**

## Graduation requirements

As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to graduate. No degrees will be conferred until the application to graduate has been finalized.

Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

**Visit the academic regulations section for additional information on graduation requirements.**

## Admission requirements

Degree:	Semester(s) of entry:	Deadline dates:	Test requirements:
M.S.	Fall	Jun 1	Satisfactory scores on the GRE; minimum TOEFL or IELTS for non-native speakers

## Special requirements

In addition to the general admission requirements of the VCU Graduate School (<http://bulletin.vcu.edu/graduate/study/admission-graduate-study/admission-requirements/>), the general entrance requirements for the Master of Science in Clinical Laboratory Sciences for the advanced master's concentration are:

1. Baccalaureate degree from an accredited college or university with a major in clinical laboratory sciences (medical technology)
2. National certification as a medical laboratory scientist or equivalent level
3. Minimum undergraduate GPA of 3.0 on a 4.0 scale for at least the last two years of undergraduate work
4. Three letters of recommendation from employers or recent instructors addressing academic potential
5. Satisfactory interview

6. Minimum TOEFL of 600 (paper), 250 (computer) or 100 (IBT); or minimum IELTS score of 7.0 for international students whose native language is not exclusively English

## Degree requirements

In addition to the general VCU Graduate School graduation requirements (<http://bulletin.vcu.edu/academic-regs/grad/graduation-info/>), students in the Master of Science degree program in Medical Laboratory Sciences are required to complete a minimum of 34 graduate credit hours to include 20 credits from core courses and 11 credits from discipline-specific courses in Public Health Laboratory Sciences, and 3 credits of electives.

Full-time candidates require a minimum of two academic years to complete the program. Part-time students must complete all work requirements within six years. An interruption in registration in excess of one semester requires prior approval of the department.

In addition to these requirements, the department faculty will review continuation in the program if:

1. A student fails to achieve a minimum GPA of 3.0
2. A student receives a D or F in a course.
3. A student receives a grade of C on more than one CLLS graduate course or more than nine graduate credit hours (CLLS and non-CLLS credits)
4. A student receives a grade of U (unsatisfactory) on required graduate course work
5. A student fails to demonstrate appropriate professional responsibility

## Curriculum requirements

Course	Title	Hours
<b>Core courses (20 credits)</b>		
ALHP 594	Health Education Practicum	4
BIOS 543	Graduate Research Methods I	3
CLLS 661	Research Methodology in Medical Laboratory Sciences	3
CLLS 690	Clinical Laboratory Sciences Seminar (one-credit course taken three times)	3
CLLS 790	Research in Clinical Laboratory Sciences	4
HADM 602	Health System Organization, Financing and Performance	3
<b>Concentration courses (11 credits)</b>		
CLLS 595	Clinical Practicum	3
CLLS 622	Fundamentals of Public Health, Epidemiology and Laboratory Surveillance	3
CLLS 624	Laboratory Techniques and Emergency Response and Preparedness	3
CLLS 626	Quality and Ethics	2
<b>Electives (3 credits)</b>		
Select three credits in consultation with an adviser.		3
<b>Total Hours</b>		<b>34</b>

**The minimum number of graduate credit hours required for this degree is 34.**

### Contact

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**Program website:** [cls.chp.vcu.edu](https://cls.chp.vcu.edu) (<https://cls.chp.vcu.edu/>)