

Medical Laboratory Sciences Program (M.L.S.)

The Faculty of Sciences at Haigazian University offers a program leading to a Bachelor of Science degree in Medical Laboratory Sciences.

Medical Laboratory Sciences is the study of the biochemistry and physiology of the clinical aspects of medicine. Knowledge of basic applied sciences (biology, chemistry and physics) is a necessity as a prerequisite for the knowledge of basic medical sciences, of which medical laboratory science is a vital and integral part. It takes four years to complete the M.L.S. program.

On completion of the degree in MLS from Haigazian University students will:

- Be prepared to become competent Medical Laboratory Scientists functioning in the clinical laboratory science field.
- Be able to perform laboratory tests with accuracy and precision.
- Understand and apply laboratory safety regulations and compliance measures.
- Demonstrate mastery of fundamental laboratory techniques in a safe and proficient manner.
- Demonstrate proficiency in analytical skills (technical competency).
- Be able to effectively communicate medical and scientific information to the health-care system.
- Be prepared to work or study in scientific/technical areas, supervision/management, higher education and research.
- Demonstrate appropriate ethical and professional behavior.

To be eligible for admission to the M.L.S. program, candidates must have satisfactorily completed the Freshman Science Program in the Faculty of Arts and Sciences, or an equivalent program, with a grade of 70 or more in at least 12 credit hours and an average of 70 or more in chemistry, physics and mathematics. Lebanese students must hold the Lebanese Baccalaureate, Part II (Life Science or General Science), or its equivalent, and should be considered by the Admissions Committee to be eligible for admission to the Sophomore Science class.

To be eligible for graduation with the degree of Bachelor of Science with a concentration in medical laboratory sciences, a student must have satisfactorily completed the prescribed program of study of 113 credit hours (minimum) after the Freshman Science class or its equivalent and have attained a cumulative average of 70.

M. L. S. Requirements

General Education (31 cr.)

Core requirements for all HU students are listed on page 58.

Core Courses (70 cr.)

MLS 202	Clinical Biochemistry (equivalent to BIO 232)	4 cr.
MLS 203	Endocrinology (equivalent to BIO 224)	3 cr.
MLS 205	Introductory Haematology	3 cr.
MLS 206	Clinical Haematology	3 cr.
MLS 207	Immunology (equivalent to BIO 220)	3 cr.
MLS 208	Serology	3 cr.
MLS 209	Basic Biochemistry (equivalent to BIO 204)	4 cr.
MLS 210	Human Physiology (equivalent to BIO 202)	4 cr.
MLS 211	Basic Histology (equivalent to BIO 209)	4 cr.
MLS 219	General Bacteriology	3 cr.
MLS 220	Clinical Bacteriology	3 cr.
MLS 221	Medical Parasitology (equivalent to BIO 221)	4 cr.
MLS 223	Medical Mycology	1 cr.
MLS 225	Epidemiology and Biostatistics	3 cr.
MLS 226	Molecular Diagnostic (equivalent to BIO 226)	4 cr.
MLS 227	Virology (equivalent to BIO 227)	3 cr.
MLS 228	Human Genetics (equivalent to BIO 207)	4 cr.
MLS 230	Clinical Chemistry Special Topics + Practicum	3 cr.
MLS 240	Clinical Haematology Practicum	2 cr.
MLS 250	Clinical Bacteriology Practicum	2 cr.
MLS 260	Clinical Parasitology and Urinalysis	2 cr.
MLS 270	Blood-Banking: Transfusion Medicine and Immunohaematology	2 cr.
MLS 290	Seminar	1 cr.
MLS 299	Hospital Training I	1 cr.
MLS 299C	Hospital Training II	1 cr.

Science Requirements (12 cr.)

BIO 201	General Biology I (taken as university requirement)	
CHY 201	Chemical Principles	3 cr.
CHY 206	Quantitative Analysis	4 cr.
CHY 208	Brief Survey in Organic Chemistry	3 cr.
CHY 213	Organic Chemistry Laboratory	2 cr.