

University of Medical Sciences and Technology (UMST) Sudan and Capital University (CU) in Somalia

MSc in Medical Laboratory Sciences with five specializations:

- 1- in Clinical chemistry
- 2- in Hematology
- 3- in Histopathology
- 4- in Parasitology
- 5- in Microbiology

ENTRY REQUIREMENT

The applicant must have and fulfill the following requirement:

1. Original school certificate authenticated by the higher education and foreign affairs ministers.
 - A copy of birth certificate.
 - A copy of valid passport
 - Three- passport size photographs.
 - Curriculum vitae with experience
 - First Degree in Basic Sciences, Applied Sciences or professional qualification from any institution that is approved by the CU and UMST and authenticated by the higher education and foreign affairs ministers.
 - Candidates intending are required to have good command of English as pre-requisites for entry into this graduate programme.
(Formal Assessment for English level of proficiency)
 - File for documentation
 - Payment Registration fee 100\$
 - Payment of number of University 100\$

Introduction of the Programme:-

This is a full-time program that enables professionals who hold a bachelor's degree in medical laboratory science to prepare for advanced clinical, technical, and administrative career opportunities. Through courses, and research projects, students enhance their proficiency in a chosen medical laboratory science discipline: clinical chemistry, hematology, histopathology, parasitology or microbiology. Certification of a master degree in medical laboratory sciences in different disciplines is available upon completion of specific requirements.

-The program has three course sequence areas in which students take advanced theoretical courses: general course sequence, specialty course sequence and research course sequence. A thesis as a partial fulfillment to the course is required.

The program is designed to take a full-time student two years to complete.

Accreditation: The Master degree program is accredited by Sudan of the Ministry of Higher Education.

Credential Conferred: Master of Science in Medical Laboratory Sciences degree.

Length of Study: Approximately two years full-time for certified medical technologists.

-The student is certification eligible upon completion of the program.

Students must: Pass required courses with a minimum of 60%.

-Present a thesis that reports original research within the student's chosen discipline, and Pass a final thesis and examination.

PROGRAMME ADMINISTRATION:

- ❖ Duration of study for this programme is 18 months or 3 semesters.
- ❖ Classes for the programme are conducted at Capital University Of Somalia

PROGRAMME STYRUCTURE:

Programme Structure

MSc in Medical Laboratory Sciences with five specializations – **Credit hours**
Semester (1)

(Specialization)

Credit Hours = 18 CRH

Form this semester, students will start their specialization.

Courses of Chemical Pathology Specialization:

Code	Course Title	redit hour	Contact hour Hours/Week	
			heory	ractical
MLS-CCHM-521	Diagnost iMolecula Biology	3(2+1)	2	1
MMLS-CCHM-522	Advance Research Methodology & Biostatistics	3(2+1)	2	1
MMLS-CCHM-523	Laboratory Quality Management	3(2+1)	2	1
MMLS-CCHM-524	chemical Pathology	9(6+3)	6	3
Total		18	12	6

Courses

of Histopathology and Cytology Specialization:

Code	Course Title	redit hour	Contact hour Hours/Week	
			heory	ractical
MLS-HISTO-521	Diagnostic Molecular Biology	3(2+1)	2	1
MLS-HISTO-522	Advance research methodology & Biostatistics	3(2+1)	2	1
MMLS-HISTO-523	Laboratory Quality Management	3(2+1)	2	1
MMLS-HISTO-524	Histopathology and Cytology	9(6+3)	6	3
Total		18	12	6

Courses of Parasitology and Medical Entomology Specialization:

Code	Course Title	Credit hour	Contact hour Hours/Week	
			theory	practical
MLS-PARA-521	Diagnostic Molecular Biology	3(2+1)	2	1
MMLS- PARA-522	Advance research methodology	3(2+1)	2	1
MMLS- PARA-523	Laboratory Quality Management	3(2+1)	2	1
MMLS- PARA-524	Parasitology and Medical Entomology	9(2+1)	6	3
Total		18	12	6

Courses of Microbiology Specialization:

Code	Course Title	Credit hour	Contact hour Hours/Week	
			theory	practical
MLS-MICRO-521	Diagnostic Molecular Biology	3(2+1)	2	1
MLS-MICRO-522	Advance research methodology	3(2+1)	2	1
MLS-MICRO-523	Laboratory Quality Management	3 (2+1)	2	1
MMLS-MICRO-524	Microbiology	9 (6+3)	6	3
Total		18	12	6

Courses of Hematology and Immunhematology Specialization:

Code	Course Title	Credit hour	Contact hour Hours/Week	
			theory	practical
MLS-HEMA-521	Diagnostic Molecular Biology	3(2+1)	2	1
MLS-HEMA-522	Advance research methodology	3(2+1)	2	1
MLS- HEMA -523	Laboratory Quality Management	3(2+1)	2	1
MLS- HEMA -524	Hematology	9(6+3)	6	3
Total		18	12	6

Semester (2)

(Specialization)

Credit Hours = 18 CRH

Students continue in their specialization.

Courses of Chemical Pathology Specialization:

Code	Course Title	Credit hour	Contact hour Hours/Week	
			Theory	Practical
MLS-CCHM-531	Advance Techniques in Medical Laboratory	3(2+1)	2	1
MMLS-CCHM-532	Scientific writing and proposal preparation and paper critique	2(2+0)	2	0
MMLS-CCHM-533	Fundamentals of Medical Education	2(2+0)	2	0
MMLS-CCHM-534	Epidemiology	2(2+0)	2	0
MMLS-CCHM-535	chemical Pathology	9 (6+3)	6	3
Total		18	12	6

Courses of Histopathology and Cytology Specialization:

Code	Course Title	Credit hour	Contact hour Hours/Week	
			Theory	Practical
MLS-HISTO-531	Advance Techniques in Medical Laboratory	3(2+1)	2	1
MMLS- HISTO-532	Scientific writing and proposal preparation and paper critique	2(2+0)	2	0
MMLS- HISTO-533	Fundamentals of Medical Education	2(2+0)	2	0
MMLS- HISTO-534	Epidemiology	2(2+0)	2	0
MMLS- HISTO-535	histopathology and Cytology	9 (6+3)	6	3
Total		18	12	6

Courses of Parasitology and Medical Entomology Specialization:

Code	Course Title	Credit hour	Contact hour Hours/Week	
			Theory	Practical
MLS-PARA-531	Advance Techniques in Medical Laboratory	3(2+1)	1	1
MMLS-PARA-532	Scientific writing and proposal preparation and paper critique	2(2+0)	2	0
MMLS-PARA-533	Fundamentals of Medical Education	2(2+0)	2	0
MMLS-PARA-534	Epidemiology	2(2+0)	2	0
MMLS-PARA-535	Parasitology and Medical	9 (6+3)	6	3

	Entomology			
Total		18	12	6

Courses of Microbiology Specialization:

Code	Course Title	Credit hour	Contact hour Hours/Week	
			theory	practical
MLS-MICRO-531	Advance Techniques in Medical Laboratory	3(2+1)	2	1
MLS-MICRO-532	scientific writing and proposal preparation and paper critique	2(2+0)	2	0
MMLS-MICRO-533	Fundamentals of Medical Education	2(2+0)	2	0
MMLS-MICRO-534	Epidemiology	2(2+0)	2	0
MMLS-MICRO-535	Microbiology	9 (6+3)	6	3
Total		18	12	6

Courses of Hematology and Immunhematology Specialization:

Code	Course Title	Credit hour	Contact hour Hours/Week	
			theory	practical
MLS- HEMA -531	Advance Techniques in Medical Laboratory	3(2+1)	2	1
MMLS- HEMA -532	scientific writing and proposal preparation and paper critique	2(2+0)	2	0
MMLS- HEMA -533	Fundamentals of Medical Education	2(2+0)	2	0
MMLS- HEMA -534	Epidemiology	2(2+0)	2	0
MMLS- HEMA -535	Hematology and Immunohematology	9 (6+3)	6	3
Total		18	12	6

**Semester (3)
Dissertation
Credit Hours = 6 CRH**

Code	Course name	Credit hour
MLS-DISSR-541	Dissertation	6
Total		6

ASSESSMENT/EXAMINATION:

Assessment of the Candidates for the courses shall consist of continuous assessment and final examination. The Final examination grade for the course work is as follows.

Grade	Grade point	Status
	A+	Excellence
	A	Very Good
	B+	Good
	B	Pass
	F	Fail
	I	Incomplete

Candidates who fail any of the registered course work are required to repeat the examination in the next semester. The candidates are allowed to repeat the examination twice. After the second attempt, the candidates will only be allowed to continue with the Masters Programme with the approval from UMST Post-Graduate Committee.

Candidates who fulfilled the following criteria will be awarded with the Masters Degree:

- a) Complete at credit hours of course work.

- b) Pass all the Core and Specialization Courses.
- c) Pay all the required fees.

Financial Arrangements

- 1- Tuition fees for the programmes is 2800 USD (two thousand and eight Hundred United States Dollars), and the **registration fee and roll number from Ministry of Higher Education in Sudan is 200\$**)
- 2- The installment arrangements are **40% within** first semester, then **30% within** thesecond semester and last **30% within** third semester.