

Medical Laboratory Technology (MLT) – 3 Year Syllabus

Program: Bachelor of Vocation (B.Voc.) in Medical Laboratory Technology

Duration: 3 Years (6 Semesters)

Total Credits: Approximately 120–140 (varies by university)

Eligibility: 10+2 (Science preferred)

Note: Subject codes differ among universities. The codes below follow a commonly used B.Voc. MLT structure based on vocational university curricula.

Semester I

Subject Code	Subject Name
BVMLT-101	Human Anatomy & Physiology-I
BVMLT-102	Basic Concepts of Laboratory Technology
BVMLT-103	Fundamentals of Microbiology
BVMLT-104	Phlebotomy & Biomedical Waste Management
BVMLT-105	Fundamentals of Computer Applications
BVMLT-106	General English
BVMLT-107	Communication Skills
BVMLTP-108	Practical-I

Semester II

Subject Code	Subject Name
BVMLT-201	Human Anatomy & Physiology-II
BVMLT-202	Clinical Pathology
BVMLT-203	Introduction to Hematology
BVMLT-204	Introduction to Biochemistry
BVMLT-205	Advanced Phlebotomy & Laboratory Ethics
BVMLT-206	Communication Skills-II
BVMLT-207	Computing Skills-II
BVMLTP-208	Practical-II

Semester III

Subject Code	Subject Name
BVMLT-301	Advanced Medical Laboratory Technology
BVMLT-302	Routine Hematological Tests
BVMLT-303	Microbial Physiology & Metabolism
BVMLT-304	Blood Banking
BVMLT-305	Financial Literacy
BVMLT-306	Digital Literacy
BVMLT-307	Legal & HR Policies
BVMLTP-308	Practical-III

Semester IV

Subject Code	Subject Name
BVMLT-401	Serology & Immunology
BVMLT-402	Bacteriology
BVMLT-403	Biochemistry & Metabolism
BVMLT-404	Pathogenic Microbiology
BVMLT-405	Histopathology
BVMLT-406	Functional English
BVMLTP-407	Practical-IV

Semester V

Subject Code	Subject Name
BVMLT-501	Advanced Clinical Biochemistry
BVMLT-502	Immunology & Serology
BVMLT-503	Quality Control in Medical Laboratories
BVMLT-504	Clinical Microbiology
BVMLT-505	Epidemiology
BVMLT-506	Laboratory Management
BVMLTP-507	Practical-V

Semester VI

Subject Code	Subject Name
BVMLT-601	Molecular Diagnostics

Subject Code	Subject Name
BVMLT-602	Clinical Genetics
BVMLT-603	Advanced Diagnostic Techniques
BVMLT-604	Health Care Management
BVMLT-605	Internship / Industrial Training
BVMLT-606	Project Work & Dissertation
BVMLTV-607	Viva Voce