

# MEDICAL LABORATORY TECHNICIAN

Associate in Applied Science Degree | Career Program | Department of Biological Sciences

## Program Description

The Medical Laboratory Technician (MLT) curriculum is a career program in which the student earns the AAS degree. In addition to taking general core courses, certain liberal arts and science requirements, and specialized medical laboratory technician courses, the student has a requirement to train in state-of-the-art hospital laboratories. Upon completion, students will sit for the Medical Laboratory Technician exam through the American Society for Clinical Pathology. Upon passing the exam graduates will become nationally certified and earn the NYS Clinical Laboratory Technician license.

All students wishing to enter the Medical Laboratory Technician curriculum must complete the following pre-MLT sequence with a minimum index of 2.0: BIO 11, ENG 100/110/111, CHM 17, MTH 28/28.5. Additionally, students must complete an MLT application form and be interviewed by the program director for acceptance into MLT. For a description of all admission requirements for the MLT curriculum, please consult the BCC Academic Rules and Regulations, available on the BCC website.

To be retained in the program, students must earn a minimum grade of "C" (73-76.9) in each Medical Laboratory Technician course (MLT 81, MLT 82, MLT 83, MLT 85, MLT 86, MLT 87, MLT 88, MLT 89, MLT 90). Any grade below a "C" (C minus, D plus, D, D minus or F) requires that the student repeat the course. No Medical Laboratory Technician course may be taken more than twice. Students who wish to appeal dismissal from the program or limitations on repeating courses should consult the MLT Handbook or the BCC Academic Rules and Regulations for more information.

Students must maintain an overall GPA of 2.0 (on a 4.0 scale) to enroll in MLT 90 (Clinical Internship) and to graduate from BCC.

The MLT courses are integrated and sequenced in a specific manner to enable students to attain program competencies. All required courses must be passed each semester in order to advance to the following semester.

Any two failures (grade below a "C") in any of the required MLT courses will result in dismissal from the Medical Laboratory Technician program. Because of the critical nature of the profession, deviations from professional conduct may adversely affect the patient's well-being.

Therefore, the MLT Program Director, BCC faculty and Clinical Coordinators reserve the right to immediately

remove the student from didactic, laboratory and clinical course work and/or dismiss that student from the program if it is determined that the student has acted in an unprofessional manner or if the student is unable to provide safe laboratory practices.

For a description of all academic standards for the MLT curriculum, please consult the BCC Academic Rules and Regulations available on the College website and the MLT Handbook.

## Accreditation and Licensure:

Medical Laboratory Technician (A.A.S.): The A.A.S in Medical Laboratory Technician is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Address: 5600 N. River Road, Suite 720, Rosemont, IL 60018; Telephone #: (773) 714-8880; Website: [www.naacls.org](http://www.naacls.org)

The program is approved by the New York State Education Department, Office of the Professions.

Address: PO Box 22063, Albany, NY 12201

**NOTE: Completion of a NAACLS-accredited & NYS approved program allows for certification by the American Society for Clinical Pathology (ASCP) and licensure with NYS. Please note that certification and licensing agencies may change the qualifying requirements; it is the student's obligation to meet those requirements.**

## Learning Outcomes

Upon successful completion of the Medical Laboratory Technician program requirements, students will be able to:

1. Accurately perform analytical testing on identified patient samples using appropriate reagents, method calibrators, controls, instruments, and diagnostic analyzers.
2. Differentiate between normal and abnormal cells and results, determine necessary follow up testing, carry out additional testing, as needed.
3. Adhere to strict safety and privacy requirements in the academic and professional setting.
4. Demonstrate critical thinking skills for problem solving in laboratory and clinical settings.
5. Demonstrate professionalism in the classroom and workplace and qualify for potential employment as a technician or technologist in a medical laboratory facility.

## MEDICAL LABORATORY TECHNICIAN CURRICULUM (PATHWAYS)

66 Credits required for AAS Degree

Program Director: Diane Price Banks, PhD, MPH, MLS (ASCP)<sup>CM</sup>

### Required Core

#### A. English Composition

- ENG 100 English Composition I: Integrated Reading and Writing *OR* ENG 110 English Composition I: Fundamentals of Writing and Rhetoric *OR* ENG 111 English Composition I: Writing and Rhetoric (3 Credits)

#### B. Mathematical and Quantitative Reasoning

- MTH 23 Probability and Statistics *OR* MTH 23.5 Probability and Statistics with Algebra (3 Credits)

#### C. Life and Physical Sciences

- BIO 11 General Biology I (4 Credits)

### Flexible Core

#### A. World Cultures and Global Issues

- HIS 10 History of the Modern World *OR* HIS 11 Introduction to the Modern World (3 Credits)

#### D. Individual and Society

- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)

#### E. Scientific World

- BIO 12 General Biology II (4 Credits)

#### Additional Flexible Core Requirement – Area E

- CHM 17 Fundamentals of General Chemistry (4 Credits)

**SUBTOTAL 24**

### Major Requirements

- ART 10 Art Survey *OR* MUS 10 Music Survey (1 Credit)
- BIO 22 Medical Terminology (2 Credits)
- CHM 18 Fundamentals of Organic Chemistry (4 Credits)
- MLT 81 Introduction to Medical Laboratory Technology (2 Credits)
- MLT 82 Clinical Hematology and Coagulation (4 Credits)
- MLT 83 Clinical Chemistry (4 Credits)
- MLT 85 Immunology / Serology (2 Credits)
- MLT 86 Immunohematology (3 Credits)
- MLT 87 Urinalysis and Body Fluids (2 Credits)
- MLT 88 Introduction to Clinical Microbiology (4 Credits)
- MLT 89 Diagnostic Microbiology (4 Credits)
- MLT 90 Clinical Internship (4 Credits)
- MTH 28 College Algebra and Elementary Trigonometry *OR* MTH 28.5 College Algebra and Elementary Trigonometry (Corequisite) (3 Credits)
- PSY 11 Introduction to Psychology *OR* SOC 11 Introduction to Sociology (3 Credits)

**SUBTOTAL 42**

**\*For incoming transfer students or those who change majors to Medical Laboratory Technician, the following substitutions will be made: BIO 23/24 for BIO 11/12; CHM 11/12 for CHM 17/18; and COMM 20 for COMM 11.**