

## Why Medical Laboratory Technology?

The diagnosis and management of most human diseases depends on timely and accurate performance of laboratory tests. As an indispensable part of the medical laboratory team, medical technologists and technicians provide essential information that allows a physician to make accurate judgments about a patient's state of health. Technicians may work with sophisticated laboratory equipment to grow and identify microbes, assess the immune response of patients or match blood for transfusion therapy. Practitioners combine their love of science with the rewards of a truly interesting career.

If you are fascinated by the complex way the body works and you like to work with your hands, if you have an inquisitive mind and have always been fascinated by medical research and the solutions it pursues, then Medical Laboratory Technology may well be the career for you.

## Graduates Find Jobs

Graduates of the BCC Medical Laboratory Technology program choose either to seek immediate employment or to transfer to one of several upper-division programs. Employment prospects are excellent and varied. Graduates are employed in area and regional hospitals, in physicians' office laboratories, in commercial laboratories, and in pharmaceutical companies as participants in research, product development, or sales. Salaries are currently competitive and are expected to continue to rise further over the next several years. Successful completion of national certification examinations after graduation affords mobility, job security, and access to positions in almost any area of the country.

For more information about this program, please call the Medical Technology Department at 607 778-5211 or e-mail at [wade\\_a@sunybroome.edu](mailto:wade_a@sunybroome.edu).



### Broome Community College Department of Medical Technology

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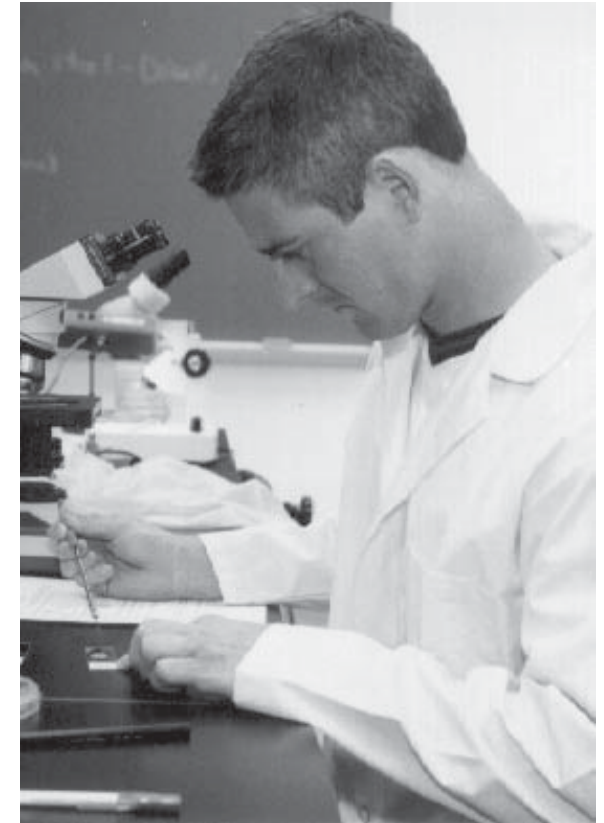
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Broome Community College does not discriminate on the basis of race, sex, color, religion, age, national origin, disability, marital status, sexual orientation, or status as a disabled veteran or veteran of the Vietnam era in the recruitment or education of students; the recruitment and employment of faculty and staff; or the operation of any of its programs or activities. Where relevant, state and federal laws apply.

# The Medical Laboratory Technology

Degree Program at  
Broome Community College





# The Medical Laboratory Technology

## Degree Program

### Associate In Applied Science

Medical Laboratory Technology at Broome Community College is a two-year, fully accredited, clinically-based curriculum leading to the Associate in Applied Science (A.A.S.) degree. Graduates of the program are automatically eligible to sit for national certification examinations.

Clinical training in hospital laboratories affiliated with the program provides hands-on experience as well as excellent training for immediate employment.

The program may require more than two years to complete, depending on a student's academic background. The department will tailor a program assuring each student the opportunity to earn the A.A.S. degree in Medical Laboratory Technology.

## Do I Qualify?

To complete the Medical Laboratory Technology program within two years, entering students should have successfully completed:

**Sequential Math I,II, and III , or A and B, or the equivalent**

**College Preparatory Biology and Chemistry or Applied Biology and Chemistry I and II**

**Minimum grade 74 in Math/Chemistry**

Students who lack the background described are still encouraged to apply. Based on an evaluation of background, individuals may be accepted to BCC and advised through a preparatory program. Each entering student is tested prior to scheduling.

Personal characteristics which predict success in this program are the ability to research and solve problems, an interest in science and medicine, curiosity, reliability, and a desire to be involved in a truly rewarding profession.

## First Level Courses

### **Introduction to Medical Laboratory Technology / MLT110**

An introduction to clinical laboratory science and the scope of the field. Includes discussions on opportunities within the profession, ethics, and professional conduct.

### **Medical Laboratory Techniques and Practices / MLT120**

Introduction to basic skills and equipment used in the clinical laboratory.

### **Human Biology I and II / BI0131,132**

Anatomy and physiology of the skeletal, muscular, nervous, circulatory, respiratory, digestive, urinary, reproductive, and endocrine systems.

### **Chemistry I and II / CHM145,146**

General chemistry, with emphasis on the basic laws and theories of chemistry and their derivation from experimental evidence.

### **College Writing I / ENG110**

Study and practice in the composition of ideas and information.

### **Introduction to Literature / LIT200**

A survey of basic genres and themes in literature, with introduction to literary analysis.

### **Survey of Organic Chemistry / CHM133**

Fundamental aspects of organic chemistry, to include nomenclature, properties of selected fundamental groups mechanisms, stereochemistry, and synthetic methods.

### **Statistics / MAT124**

Descriptive statistics, organization and presentation of data, measures of central tendency. Includes use of computer functions to analyze data.

### **Social Science electives (6 credits required)**

The Medical Laboratory Technology curriculum is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS),  
8410 W. Bryn Mawr Avenue, #670, Chicago, IL 60631-3415.  
Phone: 773-714-8880.

## Second Level Courses

### **Hematology/Coagulation / MLT201\***

Comprehensive study of the hematopoietic and hemostatic systems, to include both normal physiology and classical pathology of each system. Emphasis is placed on procedures used for testing the function of these systems.

### **Urinalysis/Body Fluids / MLT202\***

Study of the processes which result in the production of urine and body fluids. Emphasis is placed on procedures used for testing body fluids.

### **Phlebotomy / MLT204\***

Training and experience in the practice of phlebotomy. Course includes practical experience in affiliated hospital laboratories.

### **Immunology / MLT205\***

Study of the basic mechanisms of human immune responses. Laboratory sessions emphasize laboratory testing to assess immune function or to diagnose disease.

### **Immunohematology / MLT206\***

Theoretical knowledge and practical experience with blood group antigens, component and transfusion therapies, transfusion reactions, and blood group antibodies.

### **Clinical Chemistry / MLT207\***

Study of the relationships between physiological function and chemical analyses used to diagnose health and disease.

### **Pathogenic Microbiology / MLT208\***

Introduction to microorganisms of importance in human health and disease.

### **Diagnostic Microbiology Lab / MLT210\***

Comprehensive study of diagnostic methods for identification of normal and pathogenic microorganisms.

### **Introduction to Instrumental Analysis / CHM220**

Introduction to the theory and application of electrochemical, nuclear, optical, and chromatogenic methods of analytical chemistry.

**Total credits required for graduation: 72**

*\* Companion courses provide clinical experience in hospital laboratories affiliated with the program.*

