



Medical Laboratory Technician

● CAREER DEGREE **M** MIDDLETOWN CAMPUS

Accredited by:

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

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Program Description

The Associate in Applied Science degree program in Medical Laboratory Technician prepares students to become certified and licensed as medical laboratory technicians.

A medical laboratory technician is a healthcare professional who performs general testing on biological specimens such as blood, urine, various body fluids and tissues in the medical laboratory. The results of these analyses are utilized to determine the presence, absence, progress and causes of disease. A medical laboratory technician, also known as a clinical laboratory technician, enjoys science, problem solving and investigation, and performs his/her work accurately, efficiently and responsibly. The medical laboratory technician must be able to perform several duties simultaneously, work well in a fast-paced laboratory and be self-motivated.

The Medical Laboratory Technician Program curriculum corresponds to the program's mission: it provides each student with educational experiences and knowledge to develop the critical thinking, technical and interpersonal skills required to be a successful clinical laboratory scientist. The program will integrate knowledge gained from general education, biological science and clinical laboratory science so that the future laboratory professional will exercise good judgment, ethics and appropriate decision-making abilities to serve the needs of the community and the profession.

Students will take courses in the following disciplines: medical physiology, clinical chemistry, hematology, urinalysis, immunology, immunohematology and microbiology. Students study laboratory safety, microscopy and clinical instrumentation and apply the principles in the laboratory. As part of the program, a clinical rotation is assigned at one of the clinical affiliates.

The program begins in the Fall semester of each year and the courses must be taken in the sequence in which they are offered. A grade of C (2.00) or better is required in all MLT courses for progression in the program and graduation with an A.A.S. degree in Medical Laboratory Technician. Once you begin taking MLT courses, the degree must be completed within three years.

Students who are considering this program must provide their own transportation to and from the college and clinical sites. They must also have a yearly physical examination and tuberculin skin test (TST). Upon admission to the program, students will need to successfully complete a urine drug screen as well as a criminal background check. The Hepatitis B vaccine is strongly recommended. An individual who has charges pending or has ever been convicted of a felony or misdemeanor and/or has been found guilty of professional misconduct or negligence may not be eligible for licensure. Contact the Office of Professional Discipline, New York State Education Department prior to applying to this program.

Program Outcomes

Students will:

- properly collect, process and analyze biological specimens
- safely and accurately perform analytical procedures, recognize factors affecting results and take the appropriate action
- be eligible for national certification as a Medical Laboratory Technician by successfully completing the examination given by the American Society for Clinical Pathology Board of Certification
- be eligible to sit for the NYS Certified Clinical Laboratory Technician Licensing Examination

Note: Several essential movement, observational, communication, intellectual and behavioral functions are required to complete the objectives of the courses in the program and to perform the necessary duties required of a medical laboratory technician. A detailed listing of these essential functions is included in the MLT admissions packet and is discussed at the pre-admission orientation session.

Admission Criteria

Academic Requirements

- High school diploma or high school equivalency (HSE) diploma
- Eligible to take ENG 101 (Freshman English I)
- Eligible to take MAT 101 (Elementary Algebra) or have successfully completed MAT 020 (Fundamentals of Algebra)
- Students must attain a minimum cumulative GPA of 2.0

Department-Specific Requirements:

- Attendance at a pre-admission orientation. At this orientation, students will receive and sign off on information pertaining to health forms, drug testing, and criminal record policies.

SUNY Orange

Note: Admission to this program is selective. In addition to an application to the College, students must apply for acceptance into this program through the Admissions Office. Consideration for admission is based on the completion of all mandatory academic and departmental-specific requirements, highest combination of CGPA and credits completed towards the degree, Orange County residency and seat availability. All requirements must be completed and an eligibility form must be submitted to the Admissions Office before February 1 in order for a student to be considered for acceptance into this program for the Fall semester.

Transfer Options

This degree program prepares students for immediate entry into the workplace. Consult the CLS department for more information regarding further educational opportunities in this profession.

Your Career Coach

Career opportunities exist in the following fields:

- hospitals
- doctors' offices
- reference laboratories
- food/cosmetic industries
- pharmaceuticals
- veterinary laboratories
- research
- sales and marketing
- industry
- forensics
- teaching
- management
- field service
- information technology

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Medical Laboratory Technician Gateway Courses:

- Gateway courses: MLT 105
- Key courses: MLT 101, MLT 102, MLT 103, MLT 104, MLT 105, MLT 203, MLT 207, MLT 208, MLT 209, MLT 200, MLT 212, MLT 251, MLT 252
- Electives: Social Studies Electives (Two)

Courses above have been recommended by the department to help introduce you to the program (Gateway courses) and guide you in selecting courses that will provide you with the best academic experience (Key courses and suggested Electives).

First Semester

Course #	Course Name	P, C, P/C	Cr
ENG 101	Freshman English 1	P	3
CHM 103	Applied Chemistry 1	P/C	3
MAT ____	Math (Elementary Algebra or Higher)		3
MLT 101	Fundamentals of Medical Physiology	C	4
MLT 103	Immunology	C	3
MLT 105	Intro to Lab Science	C	2
	Total Semester Credits		18

Milestones

During this semester, students should:

- Meet with an advisor and schedule next semester classes
- You must pass each course in each semester with a 75 or higher in order to progress in the program; there is only one repeat allowed for each class not successfully completed

Second Semester

Course #	Course Name	P, C, P/C	Cr
ENG 102	Freshman English 2	P	3
_____	Social Science Elective		3
CHM 104	Applied Chemistry 2	P	3
MLT 102	Urinalysis and Body Fluids	P	3

Course #	Course Name	P, C, P/C	Cr
MLT 104	Hematology	P	4
	Total Semester Credits		16

Milestones

During this semester, students should:

- Schedule next semester's classes

Third Semester

Course #	Course Name	P, C, P/C	Cr
	Social Science Elective		3
MLT 203	Immunohematology	P	3
MLT 207	Clinical Chemistry 1	P	3
MLT 209	General Microbiology	P	4
MLT 251	Clinical Training 1	P, C	2
PES 100	Concepts of Wellness		1
	Total Semester Credits		16

Milestones

During this semester, students should:

- Perform a degree audit and register for classes

Fourth Semester

Course #	Course Name	P, C, P/C	Cr
MLT 208	Clinical Chemistry 2	P	3
MLT 212	Clinical Microbiology	P	3
MLT 252	Clinical Training 2	P	5
PES ____	Physical Education		1
MLT 200	Clinical Applications and Review	P, C	2
	Total Semester Credits		14

Milestones

During this semester, students should:

- Successfully complete clinical rotations
- Attend pinning ceremony
- Apply for graduation

TOTAL DEGREE CREDITS: 64