

Medical Laboratory Technician

Associate of Applied Science

East Central College

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East Central College is accredited by the Higher Learning Commission and a participant in the Academic Quality Improvement Program (AQIP)

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THE CAREER

Professionals employed in the field of medical laboratory technology are an indispensable part of the health care team. Using samples from many kinds of human specimens, laboratorians perform determinations and analysis that physicians use to maintain health or to diagnose and treat disease. Testing involves operating sophisticated instruments, identifying microscopic organisms, using routine testing kits and performing complicated assays. Laboratory work requires technical expertise and attention to detail.

A laboratory professional not only performs the testing but also recognizes disease states. With their specialized training, medical laboratory technicians provide the health care team with the most accurate results available.

The MHPC MLT program prepares you to work successfully in many environments. The program graduate is eligible to take the American Society of Clinical Pathologists (ASCP) certifying examination. Core requirements of this program can also prepare graduates to transfer to a four-year program.

EMPLOYMENT AND SALARY INFORMATION

As of 2016, the Bureau of Labor Statistics revealed there are 328,200 MLT's in the United States. The median pay for MLT's nationwide is \$50,930 per year.

Career opportunities open to medical laboratory technicians include:

- Staffing hospital, private, and public health laboratories:
- Specialized positions in hematology, clinical chemistry, clinical microbiology, parasitology, mycology, virology, serology, blood banking, hemostasis, toxicology, or molecular biology;
- Research and development of new test procedures, products, and equipment;
- Research and quality control in industry positions;
- Sales distribution of pharmaceuticals or laboratory products;
- Forensic laboratories;
- Education and training programs for medical laboratories;
- Technical specialists to teach new procedures and instrumentation.



The MHPC MLT Program is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 56000 N. River Rd. , Suite 720, Rosmont, IL 60018, (773)714-8880 or info@naacls.org.

THE PROGRAM

The AAS in Medical Laboratory Technology is a one-plusone degree program, which prepares students to practice. After graduation, students are eligible to take the American Society for Clinical Pathology national certification exam. East Central is one of six colleges in the Missouri Health Professions Consortium (MHPC) currently selected to offer the program coordinated through Moberly Area Community College. ECC offers and enrolls students in the general education coursework; sophomore level (professional level) coursework is conveyed to ECC students via virtual classroom instruction, on-campus laboratory instruction in Mexico, Missouri on designated dates (maximum three separate times), and off-campus clinical rotation experience (3-5 days/week, fall, spring and summer). Through the combination of general education, professional-level coursework, classroom, laboratory practice and clinical experiences, students learn the profession of medical laboratory technology. The professional year does not run on a traditional ECC academic cycle; rather, classes begin in August and run through the end of the following summer semester. Completion of professional course work takes one full calendar year.

Admission Requirements

To enter this course of study, students must meet these institution and program-specific criteria:

- ✓ High school diploma or the equivalent
- ✓ Application for admission to ECC
- ✓ A placement test as specified by the college (some coursework requires minimum placement results)
- ✓ Cumulative college GPA of 2.5 or greater
- ✓ TEAS examination score above the 50th percentile ✓ Completion of prerequisites with a "C" or better
- ✓ A completed MLT application on file by the specified deadline (available on the ECC Web site under the "Academic & Degree Programs link)

Transfer Options

The AAS degree is designed for students seeking employment right after graduation. However, many of the credits, particularly the general education electives earned with this degree, are accepted as transfer credit by four-year schools. Please note that these decisions are made by the bachelor degree-granting institution, not ECC. Students wanting to transfer are advised to contact the institution of their choice before beginning a program or reviewing other ECC degree plans.





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PROGRAM OF STUDY

AAS Program (65 credit hours)

This program of study is for a full-time student. Please contact an academic advisor for full course options. All academic schedules are subject to change. For the most current schedule visit www.eastcentral.edu.

PREREQUISITES/GENERAL EDUCATION

Prior to entering the program, students must complete the following courses and meet the required 2.5 cumulative GPA:

| Course | · | Hours |
|---------|--|-------|
| COL 100 | Campus Orientation | 0 |
| COL 101 | Falcon Seminar | 1 |
| CORE 42 | Writing* | 3 |
| CHM 105 | Introductory Chemistry Lecture & Lab* | 5 |
| CORE 42 | Mathematical Science* | 3 |
| CORE 42 | Civics* | 3 |
| | Total Hours | 15 |
| Course | | Hours |
| BIO 206 | Human Anatomy & Physiology I Lecture & Lab* | 4 |
| BIO 207 | Human Anatomy & Physiology II Lecture & Lab* | 5 |
| | Choose Electives: 6 Hours | |

| Choose Electives: | | o mours | |
|-------------------|---------------------------------|---------|---|
| BIO 205 | Microbiology for Allied Health* | | 4 |
| PHL 203 | Ethics | | 3 |
| PSY 101 | General Psychology* | | 3 |
| SOC 101 | General Sociology | | 3 |
| | | | |

* Coursework has a prerequisite or entry level test requirement.

Contact an academic advisor and/or course description for requirements and course sequence.

** Fieldwork requirements must be satisfied within 12 months of academic coursework.

P Prerequisites for Human Anatomy & Physiology I and II Lecture/Lab:

- CHM 105 Introductory Chemistry Lecture/Lab

Total Hours

- BIO 111 General Biology Lecture/Lab or two years high school biology with lab (must have at least a "C" grade within the last five years)

All science courses must not be older than five years prior to entrance into the program.

MEDICAL LABORATORY TECHNICIAN PROGRAM (35 CREDIT HOURS)

PROFESSIONAL YEAR-EACH August

SEMESTER 1

| Course | н | OURS |
|---------|--|------|
| MLT 150 | Introduction to Laboratory Science Methods | 2 |
| MLT 210 | Immunology | 3 |
| MLT 250 | Hematology & Coagulation | 5 |
| MLT 260 | Phlebotomy | 2 |
| MLT 291 | Hematology & Coagulation Practicum | 2 |
| | Total Hours | 14 |

SEMESTER 2

| Course | | Hours |
|---------|---|-------|
| MLT 220 | Clinical Chemistry & Urinalysis | 5 |
| MLT 280 | Clinical Microbiology | 4 |
| MLT 290 | Parasitology, Mycology & Virology | 1 |
| MLT 292 | Clinical Chemistry & Urinalysis Practicum | 2 |
| MLT 293 | Clinical Microbiology Practicum | 2 |
| | Total Hours | 14 |

SEMSTER 3

15

| Course | | Hours |
|--------------------|----------------------------|-------|
| MLT 270 | Immunohematology | 5 |
| MLT 294 | Immunohematology Practicum | 2 |
| Total Hours | | 7 |