

Student Information Handbook Indiana University
of Pennsylvania

Department of Allied Health Professions

**Bachelor of Science in
Medical Technology**

April 2024

Also available at www.iup.edu/rn-alliedhealth

Information for Medical Technology Students

Mission

The mission of the Department of Allied Health Professions is to define, provide, and advance the education and development of professionals within the field of allied health. The mission of the program is to provide undergraduate and graduate education for students whose academic and professional goals are directed toward a career in professional nursing. The program challenges students to develop their abilities to provide care for culturally diverse populations with changing health needs. Undergraduate students have a liberal education, are clinically competent, and are prepared to function at a beginning level of professional practice. Graduate students are prepared for leadership roles. The nursing faculty supports the expansion of nursing science through scholarly work and fosters a commitment to lifelong learning and community service.

History

Indiana University of Pennsylvania first offered the Bachelor of Science degree program in medical technology in 1968. In 1973 the respiratory care program, then known as respiratory technology, graduated its first class. Allied Health was a separate department in the university until 1989 when it merged with Nursing to become the Department of Nursing and Allied Health Professions. Nuclear medicine technology was added to the department in 1994 and the latest change to the Allied Health Program is the bachelor's degree in Medical Imaging with the option of 3 tracks – Nuclear Medicine Technology, Diagnostic Medical Sonography, or Echocardiography. The name of the medical technology program was changed to clinical laboratory science in 2003 and back to medical technology in 2019. The most recent change, approved in 2003, was the addition of a special curriculum track for respiratory therapists who are already certified and interested in completing a Bachelor of Science degree.

Coordinator

The allied health programs are coordinated by a faculty member in the Department of Allied Health Professions. The coordinator serves as the academic advisor for all students in the Medical Imaging and Medical Technology programs.

Communication and Contacts

All allied health students are expected to use their IUP email address. Important and helpful information is sent to students from the coordinator, secretary, registrar, and other campus offices. Assistance with the use of the IUP email system is available at 724-357-4000. The IT Support Center is in Delaney Hall, Suite G35. Hours are Monday through Friday from 7:30 a.m. to 5:30 p.m. and 8:00 a.m. to 4:30 p.m. during summer sessions, breaks, and when classes are not in session. The web address is www.iup.edu/ITSupportCenter.

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Medical Technology

The medical technology professional is qualified by academic and applied science education to provide service and research in medical technology and related areas in rapidly changing and dynamic healthcare delivery systems. Medical technologists perform, develop, evaluate, correlate, and assure accuracy and validity of laboratory information; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients. The medical technologist has diverse and multi-level functions in the areas of analysis and clinical decision-making, information management, regulatory compliance, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed, or performed. Medical technologists possess skills for financial, operations, marketing, and human resource management of the clinical laboratory. Medical technologists practice independently and collaboratively, being responsible for their own actions, as defined by the profession. They have the requisite knowledge and skills to educate laboratory professionals, other health care professionals, and others in laboratory practice as well as the public.

The ability to relate to people, a capacity for calm and reasoned judgment and a demonstration of commitment to the patient are essential qualities. Communication skills extend to consultative interactions with members of the healthcare team, external relations, customer service, and patient education. Laboratory professionals demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community.

At career entry, the medical technologist will be proficient in performing the full range of clinical laboratory tests in areas such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular, and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms. The medical technologist will have diverse responsibilities in areas of analysis and clinical decision-making, regulatory compliance with applicable regulations, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed, or performed. The medical technologist will also possess basic knowledge, skills, and relevant experiences in:

- a. Communications to enable consultative interactions with members of the healthcare team, external relations, customer service and patient education.
- b. Financial, operations, marketing, and human resource management of the clinical laboratory to enable cost-effective, high-quality, value-added laboratory services.
- c. Information management to enable effective, timely, accurate, and cost-effective reporting of laboratory-generated information.
- d. Research design/practice sufficient to evaluate published studies as an informed consumer.

Reference: Standards of Accredited Educational Programs for the Clinical Laboratory Scientist/Medical Technologist established by the National Accrediting Agency for Clinical Laboratory Sciences ([NAACLS](#), 2019).

Graduates are eligible to apply to take a certification examination offered by the [Board of Certification of the American Society of Clinical Pathologists](#) (ASCP) and are recognized as professional technologists by the designation of MLS(ASCP) after their names.

Effective February 1, 2004, individuals with MT (ASCP) certification are required to maintain a valid certificate through completion of mandatory continuing education every 3 years (in 3-year cycles). Remaining certified involves submission of a minimum of 36 continuing education credits every three years and allows individuals to use the MT(ASCP)^{CM} initials after their name, confirming “certification maintained (CM)” to their employer and peers. Individuals who do not maintain their certification will not be permitted to use the MT (ASCP) initials and their certification will expire and no longer be valid. For more information on continuing education/certification maintenance options visit the ASCP Board of Certification (www.ascp.org/). This also applies to individuals with certification identified as MLS (ASCP).

Curriculum

This 120-credit program consists of two phases of study.

- Phase one includes 90 credits of coursework in the preclinical sciences such as chemistry, biology, physics and math, plus the Liberal Studies requirements completed at the IUP main campus. All requirements in phase one must be completed before progressing to an affiliating school of medical technology/clinical laboratory science.
- Phase two includes 30 credits in the 12-month clinical year during which students attend classes and clinical rotations at one of the many affiliating schools of clinical laboratory science located in Pennsylvania and New York. The affiliate programs are fully accredited by the [National Accrediting Agency for Clinical Laboratory Science \(NAACLS\)](#) (www.naacls.org)

Advising Information

The Allied Health Coordinator is the *academic advisor* for all medical technology students.

Registration for the winter and spring sessions begins in mid-October. Registration for fall and summer sessions begins in mid-March. Schedules are available through [MyIUP](#) and are typically posted several weeks before the registration period begins.

Medical technology students receive an *early registration time* each semester and are encouraged to take advantage of this opportunity to get the best schedule possible. Students *must schedule an appointment* to meet with the allied health coordinator each semester to discuss academic progress and plans for the next semesters. At that meeting students will receive their Alternate Personal Identification Number (PIN) needed to access the registration system. Sign up times for advising appointments are posted in early-February and early-September and advisees are *notified by email* when advising appointments begin.

While students are *in their clinical year*, advising information is typically shared by email and regular mail.

Summer Course Work

Many students find it helpful to complete one or more courses during the summer months. IUP offers several courses during the summer that are included in the requirements for medical technology majors. The summer schedule is available for view in late October at [MyIUP](#).

Students may also plan to take courses during the summer at other colleges or universities. This is an excellent strategy that allows students to take a lighter course load during the academic year, pursue a special area of interest, or stay on track for the clinical year. Students interested in registering for courses at other colleges or universities should follow the steps listed below:

- a. Meet with the allied health coordinator to discuss options
- b. Use the [Online Credit Evaluation System \(www.iup.edu/admissions/\)](http://www.iup.edu/admissions/) to check course equivalency
- c. Contact the other college or university for details about schedules, registration, tuition, etc.
- d. Submit an online Application for Pre-Approval of Coursework At Another College or University (form is available at <http://www.iup.edu/registrar/policies/pre-approved-coursework/>)
- e. Earn a C or higher grade to have credits posted to IUP transcript
- f. Request an official transcript be sent to IUP Admissions Office, Credit Evaluation, 117 Sutton Hall, 1011 South Drive, IUP, Indiana, PA 15705
- g. If you cannot find an equivalent course, ask the allied health coordinator about possible substitutions
- h. If you plan to complete BIOL 150 Human Anatomy and/or BIOL 240 Human Physiology at another college or university you must be certain the courses are equivalent to the IUP courses. Many colleges and universities offer these courses as Anatomy and Physiology I and II. If so, you must complete both I and II at that college or university to have the courses posted to your IUP transcript as BIOL 150 and BIOL 240.

Learning Support Services

Academic Support: Tips for success include

- a. Get organized: Keep a detailed calendar with assignment due dates, exams, and other important dates. Block off study time and prepare for exams and assignments in advance.
- b. Make academic success a priority: Do your work first and there will be plenty of time for involvement in campus, community and social activities.

Seek Help to Succeed and Excel: IUP offers outstanding academic support services that help students be successful in their classes. Meet with your professors during their office hours and take advantage of workshops, supplemental instruction, tutors, and the Writing Center.

- c. [Department of Developmental Studies \(www.iup.edu/devstudies\)](http://www.iup.edu/devstudies)
- d. [Writing Center \(www.iup.edu/writingcenter\)](http://www.iup.edu/writingcenter)

Tutors are also available for chemistry, physics and math courses. See the allied health coordinator for details.

Learn More About Medical Technology

Program directors at the affiliating schools of medical technology encourage students to learn about the field. Consider the following actions that will help you become acquainted with the profession and strengthen your admission interview:

- a. Tour one or more hospital labs: Contact any hospital and inquire about a tour and/or shadow experience
- b. Apply for a Laboratory Student Membership in the [American Society for Clinical Pathology](http://www.ascp.org) (www.ascp.org). The membership is free, and benefits include various subscriptions and access to online tools.
- c. Contact program directors of the affiliating schools of medical technology for an appointment or to learn more about a specific program. See contact information below.
- d. Ask the allied health coordinator how to contact a student currently in the clinical year who is available to answer questions and offer suggestions
- e. Become familiar with your future professional associations
 - i. The American Society for Clinical Pathology (www.ascp.org)
 - ii. The American Society for Clinical Laboratory Science (www.ascls.org)

Application Process for Admission to an accredited Program of Medical Technology

Plan to meet with the allied health coordinator during the spring semester of the year preceding placement at a school of medical technology to review the application process.

IUP currently has established affiliating agreements with the following accredited programs of Medical Technology/Medical Laboratory Science.

Conemaugh Memorial Medical Center School of Medical Laboratory Science

G414 SON

1086 Franklin Street

Johnstown, PA 15905

814-534-5578

Fax: 814-534-9945

www.conemaugh.org

Melissa Shaffer, Program Director mshaffer@conemaugh.org

Pennsylvania General College of Health Sciences 410 North Lime

Lancaster, PA 17602

717-947-6000, Ext. 47208

Fax: 717-290-5970

www.PAcollege.edu

Carol Bond, Program Director csbond@PAcollege.edu

Reading Hospital School of Health Science
P.O. Box 16052 Reading, PA 19612-6052
484-628-0555
Fax: 484-628-5500

www.towerhealth.org

Ethan Kentzel, Program Director ethan.kentzel@towerhealth.org
William Natale, J.D., M.D., Medical Director

St. Christopher's Hospital for Children
160 E. Erie Avenue
Philadelphia, PA 19134
215-427-5306

www.stchristophershospital.com

Daphne Werz, MPH, BS, MLS(ASCP)^{CM}, Program Director Daphne.Werz@towerhealth.org

St. Vincent Health Center/Allegheny Health Network
232 West 25th Street
Erie, PA 16544
814-452-5365
Fax: 814-456-4784

www.ahn.org

Stephen Johnson, Program Director steve.johnson@ahn.org

UPMC Altoona Regional Health System 620 Howard Avenue
Altoona, PA 16601-4899
814-889-2835

www.altoonaregional.org

Andrew Baughman, Program Director baughmanad@upmc.edu

UPMC Chautauqua WCA Hospital PO Box 840
207 Foote Avenue
Jamestown, NY 14702-0840
716-664-8484
Fax: 716-664-8306

www.wcahospital.org

www.ChautauquaMLSProgram.com

Michele Harms, Program Director Harmsmg@upmc.edu

Kyle Jordan, Program Coordinator

UPMC Susquehanna Health System 777 Rural Avenue
Williamsport, PA 17701
570-321-2367

<http://www.upmcsusquehanna.org>

Amanda Mills, Director Medical Laboratory Science Program millsal@upmc.edu

WellSpan York Hospital
1001 S. George Street York, PA 17405-7198
717-851-2473
Fax: 717-851-2934
www.wellspan.org
Edwin Beitz, Program Director ebeitz@wellspan.org

Penn Medicine
Pennsylvania Hospital
Derick Lim, MS SC(ASCP)CM, MLS(ASCP)CM Program Director School of Medical
Laboratory Science
Office: 215-829-6996
Cell: 267-253-7938
Derick.Lim@penntermedicine.upenn.edu

IRMC Medical Laboratory Science (MLS) Program
835 Hospital Road
Indiana, PA 15701
724-357-7160
<https://www.irmc.org/medical-education/medical-laboratory-science-program/>
Christine D. Baum MHA MLS (ASCP), Program Director cbaum@indianarmc.org

NOTE: A temporary affiliation contract may be established to accommodate a student's interest in attending an accredited school that is currently not an IUP affiliate. For a full listing of accredited programs go to www.naacls.org. Arrangements for a temporary affiliation must be made well in advance of the start date for the clinical year. For further details contact the allied health coordinator.

To be competitive for selection by a program of Medical Technology, students are expected to earn a minimum overall grade point average of 2.80 and a minimum grade point average of 2.80 in required math and science courses. Offers for clinical site placement are competitive and not guaranteed by IUP.

Each program of Medical Technology also has a policy for determining academic good standing in the clinical year courses. Details about academic policies are available from the Programs of Medical Technology.

**All pre-clinical courses required by IUP must be completed
before progressing to the certificate year.**

Additional Requirements for Clinical Placement

Each School of Medical Technology/Clinical Laboratory Science provides prospective students with application packets and handbooks specifying additional requirements for clinical placement. Typically, these requirements include:

- Personal interview
- Letters of recommendation Official transcripts
- CPR certification
- Criminal Record clearance
- Health screening that may include a physical examination, lab work, and urine drug screens
- Health insurance
- Professional liability insurance Uniforms and/or lab coats

Details about these and other requirements and associated fees are available from the department office and the programs of Medical Technology.

Tuition, Fees and Financial Aid

During the clinical year students pay tuition and fees directly to a program of Medical Technology. Costs vary among the affiliating schools. During the clinical year, IUP bills the student each semester for a \$32.00 registration fee.

Students may apply for financial aid during the clinical year through IUP's Office of Financial Aid. Amounts of financial aid awards will vary depending on several factors including the amount of tuition and fees charged by the affiliating programs of Medical Technology.

**Students must comply with all requirements and deadlines
established by the affiliating School of Medical
Technology**

Timeline for Clinical Placement

The application for clinical placement typically begins more than one full year prior to the start of the clinical year. Students meet with the allied health coordinator during the spring semester of their sophomore year and receive guidelines and instructions for the application process. It is highly recommended that applications be completed and submitted to Programs of Medical Technology no later than mid semester of the junior year.

Each affiliating school of medical technology selects its own start date which typically ranges from early July to late August.

Information for Students in Their Clinical Year

Important Things to Remember

- Students pay a registration fee per semester to IUP. All other fees are paid directly to the clinical site. All financial aid forms should indicate IUP as your school or institution. Do not indicate your clinical location.
- Students may apply for summer financial aid only once during this 12-month clinical experience – either the summer at the beginning of the clinical experience or the summer at the completion of the clinical experience. The date your clinical experience begins and ends usually determines which summer is appropriate for financial aid application.
- Once grades are received by the Allied Health Coordinator and the Credit Evaluation Office, 30 credits will be posted to the students IUP transcript.

Graduation

- Medical technology students graduate from IUP in August of the year their clinical experience is completed. The graduation application may be completed online at [MyIUP](#). Applications for August graduates are due by April 1 of the graduation year.
- Students will be invited to participate in the University's commencement ceremony scheduled in December of their graduation year. Students have an option to attend the University's May commencement ceremony and the Department of Allied Health's commencement ceremony.
- Details about commencement may be found at www.iup.edu/commencement. Regardless of which ceremony is attended, students will officially be August IUP graduates.

Board of Registry

- Students can take the Board of Registry examination immediately upon completion of all academic coursework and the clinical year. Scores are available from the Board of Registry within a few days of the examination date. Students who elect to take the test before the August transcript is available may have to wait for their scores until a final transcript with the date of graduation can be submitted.

INDIANA UNIVERSITY OF PENNSYLVANIA
Department of Allied Health Professions

Curriculum Organization
Medical Technology

FRESHMAN YEAR

| | | | |
|------------------------------|-----------|---|-----------|
| CHEM 111 General Chemistry I | 4 | CHEM 112 General Chemistry II | 4 |
| ENGL 101 Composition I | 3 | History 196/197/198 | 3 |
| Fine Arts Requirement | 3 | Dimensions of Wellness | 3 |
| BIOL 150 Human Anatomy | 4 | BIOL 202 Principles of Cell and Molecular | |
| | 14 | Biology | 4 |
| | | | 14 |

SOPHOMORE YEAR

| | | | |
|--|-----------|-------------------------------------|-----------|
| PHYS 111 Physics I Lecture | 3 | PHYS 112 Physics II Lecture | 3 |
| PHYS 121 Physics I Lab | 1 | PHYS 122 Physics II Lab | 1 |
| CHEM 231 Organic Chemistry I | 4 | CHEM 332 Organic Chemistry II | 4 |
| *BIOL 250 Principles of Microbiology or BIOL | | Free Elective | 3 |
| 241 Intro to Medical Microbiology | 4 | Global and Multi-cultural Awareness | <u>3</u> |
| ENGL 202 Composition II | <u>3</u> | | 14 |
| | 15 | | |

Students begin the clinical application process the second semester of their sophomore year. Students may need to register for BIOL 364 in their sophomore year with special permission from the chairperson of the Biology Department.

JUNIOR YEAR

| | | | |
|-------------------------------|-----------|--|-----------|
| CHEM 325 Analytical Chemistry | 4 | CHEM 351 Biochemistry | 4 |
| BIOL 240 Human Physiology | 4 | ENGL 121 Humanities Literature | 3 |
| BIOL 364 Immunology | 3 | MATH 217 Probability and Statistics | 3 |
| Social Science Elective | 3 | Social Science Elective | 3 |
| Free Elective | <u>3</u> | Philosophy/Religious Studies Requirement | <u>3</u> |
| | 17 | | 16 |

SENIOR YEAR

Medical Technology (MEDT) courses are taught off campus for one calendar year at an affiliate School of Medical Technology/Clinical Laboratory Science. Students will not need to register for these courses. Upon successful completion of the clinical phase of the program, 30 credits will be transferred from the affiliate School of Medical Technology and posted to the official Indiana University of Pennsylvania student transcript.

*Students need permission to register for BIOL 250 from the chairperson of the Biology Department in 143 Weyandt.

- BIOL 203 Principles of Genetics & Development– highly recommended and may also fulfill the writing intensive requirement. Students may be eligible to earn minors in both biology and chemistry.