



# Pre-Medical Technology

## The Profession

The field of medical technology or clinical laboratory science is the medical application of the basic sciences in laboratory medicine. Members of this challenging profession are responsible for providing accurate, reliable laboratory tests to determine the presence, absence, extent or cause of disease. Medical technologists (clinical laboratory scientists) are highly skilled health team members who use sophisticated chemical procedures, complex instruments, and microscopic observation to relay valuable information to physicians for accurate diagnosis and treatment of disease.

## The Program at UW-Platteville

At University of Wisconsin-Platteville, a pre-medical technology student completes a two-to four-year course of study which fulfills the requirements for admission to a professional program offered at another institution. Pre-medical technology is a preprofessional program; therefore, the student must also indicate an academic major because a preprofessional program is not a major but rather a statement of intent.

## Medical Technology School

The professional program is normally a one to two year program which includes medical technology courses and clinical experience within a hospital. Upon completion of these requirements, the student will be eligible to take the registry examination for certification as a medical technologist.

## High School Preparation

In preparing to enter the pre-medical technology program, the high school student needs to acquire a strong science and health care background. In addition, a good background in communication and social skills is helpful.

## Faculty and Facilities

UW-Platteville provides the student with a strong liberal studies curriculum, a dedicated faculty and modern facilities to support the program. These include well-equipped chemistry, physics and biology laboratories.

## Placement

UW-Platteville has an excellent record of placing qualified students in professional schools of medical technology.

## Outstanding Career Opportunities

The job opportunities for qualified medical technologists occur in hospitals, clinics, private laboratories, public health laboratories, reference clinical laboratories and the pharmaceutical industry. Opportunities for sales positions with equipment and laboratory supply companies and in specialized research study also exist. Several types of advanced degrees are also available to the medical technologist, leading to specialization in teaching or administration, or emphasis in a particular specialty area, i.e. microbiology, hematology, blood bank operation or biochemistry. The majority of medical technologists work in hospital laboratories, especially in metropolitan areas because of the large number of hospitals in these areas.

Medical technology is a challenging career experiencing rapid growth in demand in accordance with the increasing health care needs of a growing population.

## Suggested Course of Study

The requirements of the UW-Platteville pre-medical technology program are designed to prepare students for a professional program, for example at UW-La Crosse. The same requirements, however, are necessary for admission into most schools of medical technology. Pre-medical technology students are advised to seek information about requirements from the professional school they plan to attend.

## Minimum Requirements

### Science/Mathematics

- 1) General Chemistry 1140, 1240; Organic Chemistry 3510, 3540, 3610, 3630; Biochemistry 4630, 4720; Quantitative Analysis 2150; Instrumental Analysis 4240
- 2) General and Advanced Biology, 16-21 credits (Choices: General Zoology 1450, Human Anatomy and Physiology 2140/2240, Cell Biology 2040, Microbiology 3240, Advanced Physiology 4240, Histology 4340, Genetics 3330, or Immunology 3620)
- 3) Physics 1110, 1140, 1210, 1240
- 4) Mathematics 5-8 credits, Algebra 1530 and Trigonometry 2530 or Pre-calculus 2450; Elementary Statistics 2430
- 5) Computer Science 1230

## Humanities/Social Sciences

- 1) Humanities 6-12 credit hours (i.e., Literature, Philosophy, Art, Music, Theatre, History)
- 2) Social Sciences 6-9 credit hours (i.e., Anthropology/ Sociology, Economics, Criminal Justice, Political Science, Psychology)
- 3) English 1130 and 1230 and/or Literature and Communication Arts

## For More Information

For more information write to the Pre-Medical Technology Advisor, Department of Biology, UW-Platteville, 1 University Plaza, Platteville WI 53818-3099, or call 608.342.1793.

For general information on the university and its programs, consult the website at [www.uwplatt.edu](http://www.uwplatt.edu) or contact Prospective Student Services, UW-Platteville, 1 University Plaza, Platteville, WI 53818-3099, or call toll-free 1.877.897.5288 or 608.342.1127.

The University of Wisconsin-Platteville does not discriminate on the basis of age, race, creed, color, handicap, sex, sexual orientation, developmental disability, national origin, ancestry, marital status, arrest record or conviction record.

## Suggested Course of Study

### First Year

#### First Semester

1140	General Chemistry	4
1450	General Zoology	5
1130	English	3
Electives**		3-6
		<b>15-18</b>

#### Second Semester

1240	General Chemistry	4
1230	English	3
1530	*College Algebra (Trigonometry 2530, Pre-Calculus 2450)	3-5
1350	General Biology	5
		<b>15-17</b>

### Second Year

#### First Semester

3540	Organic Chemistry I (Lab 3510)	4
1140	Introductory Physics (Lab 1110)	5
2140	Human Anatomy and Physiology I	4
Elective**		3
1000	Physical Education (or 1110-1490)	1
		<b>17</b>

#### Second Semester

3630	Organic Chemistry II (Lab 3610)	4
1240	Introductory Physics (Lab 1210)	5
2240	Human Anatomy and Physiology II	4
1000	Physical Education (or 1110-1490)	1
Elective** (Advanced Social Science, Humanities, or Fine Arts)		3
		<b>17</b>

### Third Year

#### First Semester

2040	Cell Biology	4
3240	Microbiology	4
4630	Biochemistry (Lab 4720)	5
2430	Elementary Statistics	3
		<b>16</b>

### Second Semester

4240	Instrumental Analysis	4
1230	Computer Science	3
3000	English: Technical Writing	3
Advanced Biology		3-4
	(Histology 4340, Genetics 3330, Comparative Anatomy 3040)	
3620	Immunology	2
		<b>15-16</b>

### Fourth Year

#### First Semester

2150	Quantitative Analysis	5
Advanced Biology		3-4
	(Advanced Physiology 4240, Embryology 3140 or Field Biology course)	
Electives**		3-6
1010	Public Speaking	2
		<b>15-17</b>

#### Second Semester

Advanced Biology		4-7
	(Comparative Anatomy 3040, Histology 4340, Genetics 3330, Field Biology courses)	
Electives**		9-12
		<b>15-18</b>

\*In most cases, proficiency in College Algebra and Trigonometry is required. This requirement can be met in Pre-Calculus 1450.

\*\*Electives include choices in humanities and fine arts (i.e. literature is recommended, philosophy, art, music theatre and/or history), social sciences (i.e. anthropology, sociology, economics, criminal justice, political science and/or psychology), international and ethnic/gender studies.

\*\*\*This program of study (or a similar program) is prepared for a student majoring in biology, who completes graduation requirements in four years at UW-Platteville with a pre-medical technology emphasis. Many alternate programs exist.