

BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY

Program Director: Interim, Ron Hovis

Program Advisor: Kirsten Donohoo

Location: GRB 230A

Telephone: 940-898-3328

The Medical Technology Program (also known as Clinical Laboratory Sciences) is offered through the Department of Biology. The program is designed to prepare the student as a member of the health services team and leads to the Bachelor of Science degree. The student completes the pre-clinical phase during the first three years in the program and begins the clinical sequence in the senior year. This year is completed at a major medical technology school approved by TWU and the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

The medical technologist becomes increasingly important as new and more effective techniques of laboratory diagnosis are developed. In addition, positions are frequently available in medical research. Career opportunities are found throughout the country in large and small communities.

Certification

Completion of the Program qualifies the Medical Technology student to take the National Registry Examination for certification as MT (ASCP).

Total Semester Credit Hours (sch): 120-135

Major: 32 sch

Program Code: MEDTECH.BS CIP Code: 51.1005

Degree Requirements

Texas Core Curriculum

Code	Title	SCHs
ENG 1013	Composition I	3
ENG 1023	Composition II	3
Mathematics		3
Life & Physical Sciences		6
Language, Philosophy, & Culture		3
Creative Arts		3
HIST 1013	History of the United States, 1492-1865	3
HIST 1023	History of the United States, 1865 to the Present	3
GOV 2013	U.S. National Government	3
GOV 2023	Texas Government	3
Social & Behavioral Sciences		3
CAO: Women's Studies		3
CAO: First Year Seminar, Wellness or Mathematics		3
Total SCHs		42

Courses Required for Major

Code	Title	SCHs
BIOL 1113 & BIOL 1111	Principles of Biology I and Principles of Biology I Laboratory	4

BIOL 1123 & BIOL 1121	Principles of Biology II and Principles of Biology II Laboratory	4
BIOL 4223 & BIOL 4221	Ecology and Ecology Laboratory (or other BIOL elective)	4
BIOL 4681	Biology Seminar (Satisfies oral communication)	1
BIOL 4811 & BIOL 4813	Molecular and Cellular Biology: Gene Expression Laboratory and Molecular and Cellular Biology: Gene Expression	4
BACT 3113 & BACT 3111	General Microbiology and General Microbiology Laboratory	4
BACT 4113 & BACT 4111	Immunology and Immunology Laboratory	4
BOT 2113 & BOT 2111	Plant Biology and Plant Biology Laboratory	4
Biology Electives		3
Total SCHs		32

Other Requirements

Code	Title	SCHs
CHEM 1113 & CHEM 1111	General Chemistry I and General Chemistry Laboratory I (may be applied from core)	4
CHEM 1123 & CHEM 1121	General Chemistry II and General Chemistry Laboratory II (may be applied from core)	4
CHEM 2213 & CHEM 2211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 3223 & CHEM 3221	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 3333 & CHEM 3331	Quantitative Chemical Analysis and Quantitative Chemical Analysis Laboratory	4
PHYS 1133 & PHYS 1131	Principles of Physics I and Principles of Physics Laboratory I	4
MATH 1303	Elementary Analysis I (may be applied from core)	3
MATH 1313	Elementary Analysis II (may be applied from core)	3
Total SCHs		30

Electives

Code	Title	SCHs
	Medical Technology Clinical Rotation	27
Total SCHs		27

Students must satisfy 3 hour global perspectives graduation requirement.

During the first three years of this program, students complete core requirements toward preparation for clinical training in a Medical Technology School or a hospital. Students may need to complete some of this coursework during summer sessions in order to finish classes within a three year period. The senior year will be spent at a hospital with a contractual agreement with TWU.

General types of courses in the senior year include studies in the areas of microbiology, parasitology, clinical chemistry, hematology, serology, urinalysis, mycology, and histology.

Clinical year arrangements are made with the Director of the Medical Technology Program. The clinical component semester credit hours will be transferred to this University as 30 or more advanced semester hours credit.

Minor

No minor is offered in Medical Technology.

The minor in chemistry is incorporated within the medical technology curriculum.

The courses required are:

Code	Title	SCHs
CHEM 1111	General Chemistry Laboratory I	1
CHEM 1113	General Chemistry I	3
CHEM 1121	General Chemistry Laboratory II	1
CHEM 1123	General Chemistry II	3
CHEM 2211	Organic Chemistry Laboratory I	1
CHEM 2213	Organic Chemistry I	3
CHEM 3221	Organic Chemistry Laboratory II	1
CHEM 3223	Organic Chemistry II	3
CHEM 3333	Quantitative Chemical Analysis	3
CHEM 3331	Quantitative Chemical Analysis Laboratory	1
Total SCHs		20

Plan of Study

First Year

Fall		TCCN	SCHs
BIOL 1111 & BIOL 1113	Principles of Biology I Laboratory and Principles of Biology I	(BIOL 1106) and (BIOL 1306)	4
CHEM 1111 & CHEM 1113	General Chemistry Laboratory I and General Chemistry I	(CHEM 1111) and (CHEM 1311)	4
MATH 1303	Elementary Analysis I	MATH 1314	3
ENG 1013	Composition I	ENGL 1301	3
UNIV 1231	Learning Frameworks: The First Year Experience	EDUC 1100, EDUC 1200, EDUC 1300	1
SCHs			15

Spring		TCCN	SCHs
BIOL 1121 & BIOL 1123	Principles of Biology II Laboratory and Principles of Biology II	(BIOL 1107) and (BIOL 1307)	4

CHEM 1121 & CHEM 1123	General Chemistry Laboratory II and General Chemistry II	(CHEM 1112) and (CHEM 1312)	4
MATH 1313	Elementary Analysis II	MATH 1316	3
ENG 1023	Composition II	ENGL 1302	3
Multicultural Women's Studies Core			3
SCHs			17

Second Year

Fall		TCCN	SCHs
CHEM 2211 & CHEM 2213	Organic Chemistry Laboratory I and Organic Chemistry I	(CHEM 2123) and (CHEM 2323)	4
BOT 2111 & BOT 2113	Plant Biology Laboratory and Plant Biology	(BIOL 1111) and (BIOL 1311)	4
GOV 2013	U.S. National Government	GOVT 2305	3
Language, Philosophy & Culture Core			3
HIST 1013	History of the United States, 1492-1865	HIST 1301	3
SCHs			17

Spring		TCCN	SCHs
CHEM 3221 & CHEM 3223	Organic Chemistry Laboratory II and Organic Chemistry II		4
BACT 3111 & BACT 3113	General Microbiology Laboratory and General Microbiology		4
GOV 2023	Texas Government	GOVT 2306	3
Creative Arts Core			3
HIST 1023	History of the United States, 1865 to the Present	HIST 1302	3
SCHs			17

Third Year

Fall		TCCN	
BIOL 4811 & BIOL 4813	Molecular and Cellular Biology: Gene Expression Laboratory and Molecular and Cellular Biology: Gene Expression		4
PHYS 1131 & PHYS 1133	Principles of Physics I and Principles of Physics I	(PHYS 1101) and (PHYS 1301)	4
Biology Elective			3
Social/Behavioral Science Core			3
	SCHs		14

Spring		TCCN	
BACT 4111 & BACT 4113	Immunology Laboratory and Immunology		4
CHEM 3333	Quantitative Chemical Analysis		3
CHEM 3331	Quantitative Chemical Analysis Laboratory		1
BIOL 4221 & BIOL 4223 ^(GP) Recommended Biology Elective)	Ecology Laboratory and Ecology		4
BIOL 4681	Biology Seminar		1
	SCHs		13

Fourth Year

Fall		TCCN	
Clinical Rotation - Upper Level			14
	SCHs		14
Spring		TCCN	
Clinical Rotation - Upper Level			13
	SCHs		13
	Total SCHs:		120

(GP) courses satisfy global perspectives graduation requirement.