

Medical Technology Undergraduate Programs Curriculum

Prerequisites and Curriculum for undergraduate programs

You must earn a grade of 'C' or better in each prerequisite course

Prerequisite Courses for Baccalaureate and Entry-Level BS/MS Programs			
Course Distribution	2+2 BS Program	3+1 BS Program	3+2 Entry-Level BS/MS Program
Biological or Chemical Sciences ¹	16	16	20
Organic Chemistry	4	4	4
College Algebra, Trigonometry, Precalculus, Calculus or Statistics	3	3	3*
English	6	6	6
Electives ²	26	41	49
Total	55	70	82

¹Suggested biological or chemical sciences courses include but are not limited to General Biology, General Chemistry and Anatomy & Physiology. ²A course in Statistics, Physics, Bioinformatics or similar coursework is recommended. *Applicants to the Entry-Level BS/MS or the Masters programs should take Statistics. **Credits may be part of or in addition to an earned bachelors degree from an accredited institution. ***Applicants to the Advanced MS program must have a previously earned BS degree or Post-baccalaureate Certificate in Biotechnology, Cytotechnology, Medical Technology or other approved laboratory discipline.

NOTE: Graduates of associate degree MLT, CLT, BT or other similar programs may transfer technician coursework credits to satisfy the biological/chemical sciences and elective prerequisites.

"2+2" Baccalaureate Degree Program in Medical Technology

(Full-time, 2-year option for students entering with 55 specific prerequisite credits)

Junior Year

FALL SEMESTER

		<i>Semester Credits</i>
LS 303	Fundamental Clinical and Experimental Techniques	3
MT 312	Microbiology I	3
MT 323	Chemistry I	2
MT 331	Immunology	3
MT 341	Hematology I	3
CH 304	Biochemistry	3
	Total for semester	17

SPRING SEMESTER

MT 307	Clinical and Molecular Laboratory Techniques	4
MT 313	Microbiology II	3
MT 324	Chemistry II	3
MT 343	Hematology II	3
MT 352	Immunohematology	3
Total for semester		16

*Senior Year***FALL SEMESTER**

		<i>Semester Credits</i>
LS 301	Molecular Biology	3
LS 311	Functional Histology	2
HCA300	Healthcare Delivery in America	3
MT 412	Medical Technology Practicum I	4
MT 422	Medical Technology. Practicum II	4
Total for semester		16

SPRING SEMESTER

LS 416	Comprehensive Examination	1
LS 413	Pathology	2
LS 430	Laboratory Standards and Practices	3
LS 440	Current Research in the Biosciences	2
MT 442	Medical Technology Practicum III	4
MT 454	Medical Technology Practicum IV	4
Total for semester		16

Credit Summary

Credits Required for Admission	55
Credits for Junior Year	33
Credits for Senior Year	32
Total Credits for BS (Medical technology/ Clinical Laboratory Sciences, "2+2" Option)	120

"3+1" Baccalaureate Program in Medical Technology

(Full-time, 1-year option for students entering with 70 specific prerequisite credits)

FALL SEMESTER

		<i>Semester Credits</i>
LS 301	Molecular Biology	3
LS 303	Fundamental Clinical and Experimental Techniques	3
MT 312	Microbiology I	3
MT 323	Chemistry I	2
MT 331	Immunology	3
MT 341	Hematology I	3
CH 304	Biochemistry	3
Total for semester		20

SPRING SEMESTER

LS 413	Pathology	2
LS 440	Current Research in the Biosciences	2
MT 307	Clinical and Molecular Laboratory Techniques	4
MT 313	Microbiology II	3
MT 324	Chemistry II	3
MT 343	Hematology II	3
MT 352	Immunohematology	3
Total for semester		20

SUMMER SESSIONS I & II

LS 416	Comprehensive Examination	1
LS 430	Laboratory Standards and Practices	3
MT 412	Biotechnology Practicum I	4
MT 422	Biotechnology Practicum II	4
MT 442	Biotechnology Practicum III	4
MT 454	Biotechnology Practicum IV	4
Total for semester		20

Credit Summary for 3+1 Baccalaureate Degree Option

Credits Required for Admission	70
Credits for Senior Year	60
Total Credits for BS (Medical Technology/Clinical Laboratory Sciences, “3+1” Option)	130

Entry-Level BSL/MSLS Program in Medical Technology

(full-time, 2 year baccalaureate and entry-level master’s degree program for students entering with 82 specific prerequisite credits)

FALL SEMESTER

		<i>Semester</i>
		<i>Credits</i>
LS 301	Molecular Biology	3
LS 303	Fundamental Clinical and Experimental Techniques	3
CH 304	Biochemistry	3
MT 312	Microbiology I	3
MT 323	Chemistry I	2
MT 331	Immunology	3
MT 341	Hematology I	3
Total for semester		20

SPRING SEMESTER

LS 413	Pathology	2
MT 307	Clinical & Molecular Laboratory Techniques	4
MT 313	Microbiology II	3
MT 324	Chemistry II	3
MT 343	Hematology II	3
MT 352	Immunohematology	3
LS 440	Current Research in the Biosciences	3
Total for semester		21

Students who achieve a grade-point average of 3.0 or higher at the completion of two semesters of undergraduate coursework are admitted to the graduate phase of the program.

Graduate Phase

FALL SEMESTER

	Concentration Electives	6
LS 603	Research Design	3
LS 640	Methods in Bioscience Education	3
LS 801	Research Project I	1
LS 812	Practicum I	2
LS 813	Practicum II	2
	Total for semester	<u>17</u>

SPRING SEMESTER

LS 610	Regulatory and Fiscal Issues in Laboratory Management	3
LS 613	Pathology	2
LS 802	Research Project II	2
LS 814	Practicum III	2
LS 815	Practicum IV	2
LS 816	Comprehensive Examination	1
	Concentration Elective	3
	Total for semester	<u>15</u>

Credit Summary for 3+1 Baccalaureate Degree Option

	Credits Required for Admission	82
	Undergraduate Phase Credits	39
	Graduate Phase Credits	<u>32</u>
	Total Credits for BS/MS in Bioscience Technologies – Medical Technology/Clinical Laboratory Sciences Option	153