

Medical Laboratory Science (MLSc) 2025-26

The below is a suggested program summary. Actual offering may differ from semester 1 to 2.

Year 1	Semester 1	Prerequisite(s)	Semester 2	Prerequisite(s)
	BIOL 1010U - Biology I		MATH 1880U - Mathematical Modelling for Health Science	CHEM 1010U HLSC 1200U Credit restriction: HLSC 2110U
	CHEM 1010U - Chemistry I		CHEM 1020U - Chemistry II	
	HLSC 1200U - Human Anatomy & Physiology I		HLSC 1201U - Anatomy & Physiology II	
	HLSC 1701U - Information Literacy and Written Communication		MLSC 1110U - Foundations in Clinical Biochemistry	
	Open Elective		Open Elective	
Year 2	Semester 1	Prerequisite(s)	Semester 2	Prerequisite(s)
	HLSC 2460U - Pathophysiology I	HLSC 1201U or HLSC 2202U	HLSC 2461U Pathophysiology II	HLSC 2460U
	HLSC 3800U – Intro to Statistics for Health Science	24 Credit Hours	HLSC 3910U - Research Methods for Health Care Professionals	HLSC 3800U
	MLSC 1010U - Intro to Medical Laboratory Practice	CHEM 1020U and HLSC 1201U and (HLSC 2110U or MLSC 1110U)	MLSC 2111U - Clinical Biochemistry I	MATH 1880U and MLSC 1010U
	MLSC 2130U - Foundations in Clinical Microbiology and Immunology	HLSC 1201U	MLSC 2121U - Clinical Hematology I	MATH 1880U and MLSC 1010U
	Health Sciences Elective		MLSC 2131U - Clinical Microbiology I	MLSC 1010U and MLSC 2130U
Year 3	Semester 1	Prerequisite(s)	Semester 2	Prerequisite(s)
	MLSC 3111U - Clinical Biochemistry II	HLSC 2461U and MLSC 2111U	MLSC 3141U - Molecular Techniques & Complementary Technologies	MLSC 3131U and MLSC 3230U or HLSC 2465U (B grade or higher & 60 Credit Hours)
	MLSC 3121U - Clinical Hematology II	HLSC 2461U and MLSC 2121U	MLSC 3210U - Effective Leadership and Quality Management	MLSC 2111U
	MLSC 3131U - Clinical Microbiology II	HLSC 2461U and MLSC 2131U	MLSC 3220U - Transfusion Science II	MLSC 3200U
	MLSC 3200U - Transfusion Science I	MLSC 2121U	MLSC 3231U - Advanced Histotechnology	MLSC 3230U
	MLSC 3230U - Microanatomy and Histotechnology	HLSC 2461U and MLSC 1010U and MLSC 2130U	MLSC 3300U - Simulated Clinical Practicum	HLSC 2461U, MLSC 3111U, MLSC 3121U, MLSC 3131U, MLSC 3200U, MLSC 3230U
Year 4	Semester 1	Prerequisite(s)	Semester 2	Prerequisite(s)
	HLSC 4820U - Interdisciplinary Collaboration	72 Credit Hours	Open Elective	
	MLSC 4111U - Clinical Biochemistry III	MLSC 3300U; Co-Req: MLSC 4400U	MLSC 4112U - Clinical Biochemistry IV	MLSC 4111U; Co-Req: MLSC 4401U
	MLSC 4121U - Clinical Hematology III	MLSC 3300U; Co-Req: MLSC 4400U	MLSC 4122U - Clinical Hematology IV	MLSC 4121U; Co-Req: MLSC 4401U
	MLSC 4131U - Clinical Microbiology III	MLSC 3300U, and MLSC 3141U; Co-Req: MLSC 4400U	MLSC 4132U - Clinical Microbiology IV	MLSC 4131U; Co-Req: MLSC 4401U
	MLSC 4210U Professional Practice in Clinical Laboratory I	MLSC 3300U; Co-Req: MLSC 4400U	MLSC 4211U - Professional Practice in the Clinical Laboratory II	MLSC 4210U; Co-Req: MLSC 4401U
	MLSC 4220U - Transfusion Science III	MLSC 3220U & MLSC 3300U; Co-Req: MLSC 4400U	MLSC 4221U - Transfusion Science IV	MLSC 4220U; Co-Req: MLSC 4401U
	MLSC 4231U - Histopathology I	MLSC 3231U & MLSC 3300U; Co-Req: MLSC 4400U	MLSC 4232U Histopathology IV	MLSC 4231U; Co-Req: MLSC 4401U
	MLSC 4400U - Clinical Project I*	HLSC 3910U; Co-Req: MLSC 4111U, 4121U, 4131U, 4210U, 4220U, 4231U	MLSC 4401U - Clinical Project II*	MLSC 4400U; Co-Req: MLSC 4112U, 4122U, 4132U, 4211U, 4221U, 4232U

*Only with permission only of Program Director and Practicum Coordinator may HLSC 4996U – Research Applications, and HLSC 4997U - Research Applications II, replace MLSC 4400 and 4401.

Program Progression Requirements: A student must achieve a minimum grade of C in all professional medical laboratory courses (MLSC) in order to pass the course. Students who earn a grade lower than a C in any of the courses designated MLSC will be put on program probation, regardless of their overall GPA. A second grade of less than C in any repeated MLSC designated course will result in an academic standing of Program Dismissal. Also, a total of three failures in any combination of required HLSC or MLSC courses will result in an academic standing of Program Dismissal. Effective May 2023, a student who has two withdrawals from a single MLSC course and/or a total of three withdrawals from a combination of required HLSC or MLSC courses will be program dismissed.