

University School of Biotechnology
M.Sc. (Life Sciences and Systems Medicine) Programme

S.No.	Code	Course Title	Credits
SEMESTER 1			
1	BTLSM501	Introduction to Systems Medicine (Core)	3
2	BTMSc 501	Biochemistry (Core)	3
3	BTLSM503	Computer Programming (Core)	3
4	BTLSM505	Human anatomy and pathophysiology (core)	3
5	MA415	Mathematics and Biostatistics (Core)	3
6		Elective Courses (Choose any one) BTLSM507: Genetics and Evolutionary Biology Or BTLSM509: Molecular Biology of Infectious Diseases Or BTLSM511: Cell and Developmental Biology	2
7	BTLSM513	Laboratory I: Database and Computer Programming Lab	2
8	BTLSM515	Laboratory II: Biochemistry & Systems Biology Lab	2
TOTAL			21
SEMESTER 2			
1	BTLSM502	Cellular and Molecular Biology (Core)	3
2	BTMSc04	Immunology (Core)	3
3	BTLSM504	Systems Medicine and Computational Models (Core)	3
4	BTLSM506	Clinical Data Management (Core)	3
5	BTLSM508	Population Genomics (Core)	3
6		Elective Courses (Choose any one) BTLSM510-Epidemiology and Disease Models Or BTLSM512-Human Disease models in different medicine systems Or BTLASM514-Digital Health Or Courses from other schools	2
7	BTLSM516	Laboratory I: Cell Biology & Molecular Biology	3
8	BTLSM518	Laboratory II: Clinical data& Computational Modeling	2
TOTAL			22

S.No.	Code	Course Title	Credits
SEMESTER 3			
1	BTMSc512	Research Methodology and Scientific Communication Skills (Core)	3
2	BTMSc609	Intellectual Property Rights, Biosafety and Bioethics (Core)	3
3	BTLSM601	Multiomics Technologies (Core)	3
4	BTLSM603	Computational Systems Pharmacology	3
4		Elective Courses (Choose any two)	
		BTLSM605 -Medical Imaging	2
		BTMSc639-Stem Cell Biology and Regenerative Medicine	2
		BTLSM607- Precision Medicine	2
		BTLSM609 Regulatory Affairs and GCP	2
		BTMSc510- Molecular Diagnostics	2
5	BTLSM611	Laboratory I: Computational systems pharmacology lab	3
6	BTLAM613	Dissertation I	4
7	BTLSM520	Summer Training (after 2 nd Semester)	4
		TOTAL	27

SEMESTER 4			
1	BTLSM602	Dissertation II	22
		TOTAL	22

Total Credits=92