

Common broad structure of syllabus under Choice Based Credit System (CBCS) for all Post Graduate Department of Studies under Faculty of Science, BU.

Revised Framing of M.Sc. Biotechnology CBCS Syllabus, 2020

Semester I

Course				Lect. Hr /week	Dur. of Exam (in H)	Marks			Credit
Course code	Type	T/P	Name			I.A.	E.T	Total	
MSBT101 Unit I Unit II	Core	T	Biochemistry & Cell Biology	2T 2T	2H	10	20 20	50	4
MSBT102 Unit I Unit II	Core	T	Developmental Biology & Molecular Biology	4T 2T	3H	15	40 20	75	6
MSBT103 Unit I Unit II	Core	T	Analytical Techniques & Biostatistics and Computer Application	2T 2T	2H	10	20 20	50	4
MSBT104 Unit I Unit II	Core	P	Biochemistry & Cell Biology	4P 4P	4H	10	20 20	50	4
MSBT105	Core	P	Molecular biology	4P	2H	5	20	25	2
MSBT106 Unit I Unit II	Core	P	Analytical Techniques & Biostatistics and Computer Application	4P 4P	4H	10	20 20	50	4
					Total credit				24

T/P: Theory/Practical

Semester II

Course				Lect. Hr /week	Dur. of Exam (in H)	Marks			Credit
Course code	Type	T/P	Name			I.A.	E.T	Total	
MSBT201 Unit I Unit II	Core	T	Immunology & Genetics	2T 2T	2H	10	20 20	50	4
MSBT202 Unit I Unit II	Core	T	Microbiology & Industrial Applications & Genetic Engineering	2T 2T	2H	10	20 20	50	4
MSBT203	Core	T	Bioinformatics	2T	1H	5	20	25	2
MSBT204 Unit I Unit II	Core	T	IPR & Biosafety Bioentrepreneurship	2T 2T	2H	10	20 20	50	4
MSBT205 Unit I Unit II	Core	P	Immunology & Genetics	4P 4P	1H 1H		20 20	50	4
MSBT206 Unit I Unit II Unit III	Core	P	Microbiology & Industrial Applications & Genetic Engineering & Bioinformatics	4P 4P 4P	1H 1H 1H	15	20 20 20	75	6
					Total credit				24

Semester III

Course				Lect. Hr /week	Dur. of Exam (in H)	Marks			Credit
Course code	Type	T/P	Name			I.A.	E.T	Total	
MSBT301 Unit I	Core	T	Bioprocess Engineering & Technology & Immunotec hnology	2T	2H	10	20	50	4
Unit II				2T			20		
MSBT302	Core	T	Molecular Virology	4T	2H	10	40	50	4
MSBT303 Unit I	Core	P	Bioprocess Engineerin g & Technology	4P	2H	10	20	50	4
Unit II			Immunotec hnology	4P			20		
MSBT304	GE	T	A general idea on Basic & Applied Biotechnol ogy	2T	1H	5	20	25	2
OR									
MSWM304	GE	T	One GE course may be opted from SWAYAM	2T	1H	5	20	25	2
MSBT305	DE	T	305-1/305- 2/305- 3/305-4	4T	2H	10	40	50	4
MSBT306	DE	P	306-1/306- 2/306- 3/306-4	8P	2H	10	40	50	4
MSBT307	CE	P	N.A.	N.A.	N.A.	5	20	25	2
Total credit									24

CE: Community Engagement Activities; DE: Discipline-centric Elective; GE: Generic elective

MSBT 305&306-1: Plant Biotechnology; 305&306 -2 : Animal Biotechnology

MSBT 305&306 -3: Microbial Biotechnology; 305&306 -4: Computer Skills for Biological Research

***MSWM304- One GE course may be opted from SWAYAM**

Semester IV

Course				Lect. Hr /week	Dur. of Exam (in H)	Marks			Credit
Course code	Type	T/P	Name			I.A.	E.T	Total	
MSBT401	Core	T	Proteomics	4T	2H	10	40	50	4
MSBT402	Core	T	Genomics	4T	2H	10	40	50	4
MSBT403	Review of Literature on Project topic and Seminar presentation	P	N.A.	4	---	10	40	50	4
MSBT404	DE	T	404-1/404-2/404-3/404-4	4T	2H	10	40	50	4
MSBT405	DE	P	405-1/405-2/405-3/405-4	8P	2H	10	40	50	4
MSBT406	Project/ Term paper	P	N.A.	4	---	10	40	50	4
Total credit									24

MSBT404&405 -1 : Advanced Plant Biotechnology : 404&405-2: Advanced Animal Biotechnology
 MSBT404&405-3: Advanced Microbial Biotechnology: 404&405-4: Advanced Bioinformatics