

ETERNAL UNIVERSITY, BARU SAHIB



AKAL SCHOOL OF BIOTECHNOLOGY (ASB)

M.Sc BIOTECHNOLOGY SYLLABUS

**M.Sc. Programme in Biotechnology at the Eternal University Baru Sahib, Himachal Pradesh**

Semester	Course No.	Course Title	Theory	Seminar	Practical	Dissertation
Sem -I	BT-501	Cell and Molecular Biology	3			
Sem-I	BT-502	General Microbiology	3			
Sem-I	BT-503	General Biochemistry	3			
Sem-I	BT-504	General Genetics	3			
Sem-I	BT-505	Computational Biology & Biostatistics	3			
Sem-I	BT-506	Techniques in Biotechnology-I			3	
		<b>Semester-I Total</b>	<b>15</b>	<b>0</b>	<b>3</b>	<b>0</b>
Sem-II	BT-507	Plant and Animal Biotechnology	3			
Sem-II	BT-508	Pharmaceutical Biotechnology	3			
Sem-II	BT-509	Instrumental methods of analysis	3			
Sem-II	BT-510	Immunology	2			
Sem-II	BT-511	Bioprocess Engineering and Technology	3			
Sem-II	BT-512	Techniques in Biotechnology-II			3	
Sem-II	BT-591	Seminar-I		1		
		<b>Semester-II Total</b>	<b>14</b>	<b>1</b>	<b>3</b>	<b>0</b>
Sem-III	BT-513	Genetic Engineering	3			
Sem-III	BT-514	Enzymes and Enzyme Technology	3			
Sem-III	BT-515	Biosafety, Bioethics & IPR	3			
Sem-III		Optional Course*	2			
Sem-III		Optional Course*	2			
Sem-III	BT-516	Techniques in Biotechnology-III			3	
Sem-III	BT-591	Seminar on Business Plan Writing-II		1		
		<b>Semester-III Total</b>	<b>13</b>	<b>1</b>	<b>3</b>	<b>0</b>
	<b>Option-I</b>					
	BT-517	Transgenic Plants	2			
	BT-518	Food Biotechnology	2			
	BT-519	Plant Molecular Breeding	2			
	<b>Option-II</b>					
	BT-520	Drug Metabolism & Pharmacokinetics	2			
	BT-521	Drug Designing and Molecular Modeling	2			
	BT-522	Novel Drug Delivery System	2			
	<b>Option-III</b>					
	BT-523	Environmental Biotechnology	2			
	BT-524	Microbial Biotechnology	2			
	BT-525	Biosystematics and Biodiversity	2			
Sem-IV	BT-591	Evaluation Seminar		1		
Sem-IV	BT-600	Dissertation				17
		<b>Semester-IV Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>17</b>
		<b>Grand Total</b>	<b>42</b>	<b>3</b>	<b>9</b>	<b>17</b>

\*Students can take only two courses within any of the three options.