

Nepal Education Foundation Consortium of Colleges, Nepal (NEF-CCN)  
Asian Institute of Technology and Management (AITM)

## Curriculum Structure Bachelor in Biotechnology Program

B.Tech in Biotechnology is a four year program extending to 8 semesters. The curriculum consists of **152 credits**

General and Biotechnology courses	: 109 credits
Elective courses	: 3 credits
Projects and Seminars	: 9 credits
Practical	: 31 credits

S.N	Course Code	Course Name	Theory Credits	Lab Credits	Total
<b>I/I First Semester</b>					
1	BT103SH	Physics –I	3	1	4
2	BT105SH	Chemistry (Organic & Inorganic)	3	1	4
3	BT101SH	Mathematics –I	3	-	3
4	BT170CO	Computer Foundation	3	1	4
5	BT108SH	Communicative English	3	-	3
6	BT120EL	Electrical Engineering	3	1	4
<b>Total</b>			<b>18</b>	<b>4</b>	<b>22</b>
<b>I/II Second Semester</b>					
1	BT104SH	Physics –II	3	1	4
2	BT106SH	Organic Chemistry –I	3	1	4
3	BT102SH	Mathematics –II	3	-	3
4	BT171CO	Computer Programming	3	1	4
5	BT109SH	Statistics & Probability	3	-	3
6	BT140CE	Chemical Engineering	3	1	4
<b>Total</b>			<b>18</b>	<b>4</b>	<b>22</b>
<b>II/I Third Semester</b>					
1	BT207SH	Organic Chemistry II	3	1	4
2	BT210CG	Cyto - Genetics	3	1	4
3	BT211MB	Microbiology	3	1	4
4	BT212BC	Biochemistry I	3	1	4
5	BT214AP	Animal & Plant Physiology	3	1	4
<b>Total</b>			<b>15</b>	<b>5</b>	<b>20</b>
<b>II/II Fourth Semester</b>					
1	BT230MB	Molecular Biology	3	1	4
2	BT231IT	Immunotechnology	3	1	4
3	BT213BC	Biochemistry-II	3	1	4
4	BT215DB	Developmental Biology	3	1	4
5	BT216BB	Biophysics & Bioinstrumentation	3	1	4
<b>Total</b>			<b>15</b>	<b>5</b>	<b>20</b>

<b>III/I Fifth Semester</b>					
1	BT332GE	Genetic Engineering	3	1	4
2	BT333CT	Cell & Tissue Culture	3	1	4
3	BT341MP	Microbial Processing Engineering	3	1	4
4	BT342BE	Biochemical Engineering	3	1	4
5	BT334ET	Enzymology & Enzyme Technology	3	1	4
<b>Total</b>			<b>15</b>	<b>5</b>	<b>20</b>
<b>III/II Sixth Semester</b>					
1	BT335BI	Bioinformatics	3	1	4
2	BT343BP	Bioprocess	3	1	4
3	BT344DP	Downstream Processing	3	1	4
4	BT350PB	Plant Biotechnology	3	1	4
5	BT351AB	Animal Biotechnology	3	1	4
<b>Total</b>			<b>15</b>	<b>5</b>	<b>20</b>
<b>IV/I Seventh Semester</b>					
1	BT452FB	Food & Industrial Biotechnology	3	1	4
2	BT453EB	Environmental Biotechnology	3	1	4
3	BT454AB	Agriculture Biotechnology	3	1	4
4	BT490MS	Marketing & Management of Biotechnology	2	-	2
5	BT491IP	Intellectual Property Right, Biosafety & Bioethics	2	-	2
<b>Total</b>			<b>13</b>	<b>3</b>	<b>16</b>
<b>IV/II Eighth Semester</b>					
1	BT455BT	Elective I	3	-	3
2	BT456BT	Project	8	-	8
3	BT447BT	Seminar	1	-	1
<b>Total</b>			<b>12</b>	<b>0</b>	<b>12</b>