

B.Sc. in BMB Program Structure

<i>1st Year 1st Semester</i>				
Course Code	Course Title	Hours/Week		Credits
		Theory	Lab	
BMB 1101	Introductory Biochemistry	3	0	3.0
BMB 1102	Biophysical Chemistry I	3	0	3.0
BMB 1103	Bioorganic Chemistry I	3	0	3.0
BMB 1104	Biochemistry and Molecular Biology Lab I	0	3	1.5
MAT 1105	Calculus	3	0	3.0
ENG 1106	English for Effective Communication	2	0	2.0
GED1107	History of the Emergence of Independent Bangladesh	3	0	3.0
Total		17	3	18.5

<i>1st Year 2nd Semester</i>				
Course Code	Course Title	Hours/Week		Credits
		Theory	Lab	
BMB 1201	Introductory Molecular Biology	3	0	3.0
BMB 1202	Biophysical Chemistry II	3	0	3.0
BMB 1203	Bioorganic Chemistry II	3	0	3.0
BMB 1204	Biochemistry and Molecular Biology Lab II	0	3	1.5
MAT 1205	Trigonometry, Vectors & Geometry	3	0	3.0
ENG 1206	Academic Writing	2	0	2.0
BMB 1207	Seminar / Oral	-	-	1.0
Total		14	3	16.5

<i>2nd Year 1st Semester</i>				
Course Code	Course Title	Hours/Week		Credits
		Theory	Lab	
BMB 2101	Enzymology I	2	0	2.0
BMB 2102	Carbohydrate Metabolism	3	0	3.0
BMB 2103	Microbiology	3	0	3.0
GEB 2104	Introductory Animal Sciences	3	0	3.0
GEB 2105	Introductory Animal Sciences Lab	0	2	1.0
PHY 2106	Physics for Biologists	3	0	3.0
CSE 2107	Introduction to Programming with Python	2	0	2.0
CSE 2108	Introduction to Programming with Python Lab	0	3	1.5
Total		16	8	18.5

<i>2nd Year 2nd Semester</i>				
Course Code	Course Title	Hours/Week		Credits
		Theory	Lab	
BMB 2201	Enzymology II	2	0	2.0

BMB 2202	Human Physiology	3	0	3.0
BMB 2203	Lipid and Nucleotide Metabolism	3	0	3.0
BMB 2204	Bioanalytical Techniques	2	0	2.0
BMB 2205	Biochemistry and Molecular Biology Lab III	0	3	2.0
STA 2206	Biostatistics	3	0	3.0
STA 2207	Biostatistics Lab	0	4	2.0
BMB 2208	Seminar and Oral	-	-	1.0
Total		13	7	18.0

<i>3rd Year 1st Semester</i>				
Course Code	Course Title	Hours/Week		Credits
		Theory	Lab	
BMB 3101	Protein and Xenobiotic Metabolism	3	0	3.0
BMB 3102	Molecular Biology I	3	0	3.0
BMB 3103	Microbial Genetics	3	0	3.0
BMB 3104	Bioorganic Reaction Mechanism	3	0	3.0
BMB 3105	Plant Biochemistry	2	0	2.0
BMB 3106	Endocrinology	3	0	3.0
BMB 3107	Biochemistry and Molecular Biology Lab IV	0	4	2.0
Total		17	4	19.0

<i>3rd Year 2nd Semester</i>				
Course Code	Course Title	Hours/Week		Credits
		Theory	Lab	
BMB 3201	Genetic Engineering	3	0	3.0
BMB 3202	Basic Immunology	3	0	3.0
BMB 3203	Clinical Biochemistry	3	0	3.0
CHE 3204	Chemistry of Natural Products	3	0	3.0
BMB 3205	Pharmaceutical Biochemistry	3	0	3.0
BMB 3206	Biochemistry and Molecular Biology Lab V	0	4	2.0
BMB 3207	Seminar and Oral	-	-	2.0
Total		15	4	19.0

<i>4th Year 1st Semester</i>				
Course Code	Course Title	Hours/Week		Credits
		Theory	Lab	
BMB 4101	Cell Biology	3	0	3.0
BMB 4102	Environmental Biochemistry	2	0	2.0
BMB 4103	Biochemistry and Molecular Biology Lab VI	0	4	2.0
BMB 4104	Molecular Biology II	3	0	3.0
BMB 4105	Virology	2	0	2.0
BMB 4106	Research Methodology	2	0	2.0
BMB 4107	Bioinformatics	2	0	2.0

BMB 4108	Bioinformatics Lab	0	2	1.0
Total		14	6	17.0

<i>4th Year 2nd Semester</i>				
Course Code	Course Title	Hours/Week		Credits
		Theory	Lab	
BMB 4201	Genomics and Proteomics	3	0	3.0
BMB 4202	Oncology	2	0	2.0
BMB 4203	Industrial Biotechnology	2	0	2.0
BMB 4204	Advanced Immunology	3	0	3.0
BMB 4205	Neurobiochemistry	3	0	3.0
BMB 4206	Nutritional Biochemistry	3	0	3.0
BMB 4207	Project and Field Work	0	6	3.0
BMB 4208	Seminar and Oral	--	--	1.0
Total		16	6	20.0

Total Credit: 146.5