

<b>M.Sc. Bioinformatics</b>			
<b>Semester 1</b>			
	<b>CourseCode</b>	<b>Course Name</b>	<b>Credits</b>
1	BIF410	Introduction to Bioinformatics	3
2	BIF413	Programming Concepts	3
3	BIO421	Cell Biology	3
4	BIO425	Molecular Biology for Bioinformatics	3
5	BIF401	Energy and Interaction in Biological Modeling	3
6	BIF402	Database Design and Implementation for Bioinformatics	3
7	BIF487	Programming for Bioinformatics - Lab	1
8	BIF486	<b>Bioinformatics Tools - Lab</b>	1
9	BIF488	Database Design for Bioinformatics - Lab	1
	CUL401	Cultural Education	1
10	SSK401	Soft Skills	1
<b>Total Credits</b>			<b>23</b>
<b>Semester 2</b>			
1	BIF409	Structural Bioinformatics	4
2	BIF411	<b>Molecular Sequence Analysis</b>	4
3	BIF412	Mathematics for Bioinformatics	4
4	BIF414	Statistics for Bioinformatics	3
5	BIF415	Machine Learning & Data Mining	3
6	BIO412	Molecular & Cellular Biophysics	2
7	AVP411	Amrita Values Programme	1
8	SSK411	Soft Skill II	2
9	BIF489	Programming using Perl - Lab	1
10	BIO488	Cell & Molecular Biology - Lab	1
<b>Total Credits</b>			<b>27</b>
<b>Semester 3</b>			
1	BIF513	<b>Evolution and Comparative Genomics</b>	3
2	BIF518	Mathematical Modeling of Biological Systems	2
3	BIF511	Mass Spectrometry and Proteomics	3
4	BIF519	Advanced Programming for Bioinformatics	4
5	BIF520	Object Oriented Programming Language	4
6	BIF512	Computer Aided Drug Design & Pharmacoinformatics	3
7		Elective - I	2
8		Elective - II	2
		Open Elective	2
9	SSK501	Soft Skills - III	1
	BIF591	Advanced Programming - Lab	1
<b>ELECTIVES</b>			
	BIF551	Systems Biology	
	BIF561	Computational Neuroscience	

	BIF562	Neurobiology & Electrophysiology	
	BIF563	<b>Next-Generation Sequencing Analysis</b>	
	BIF564	<b>Metagenomics and Microbiome</b>	
	BIF565	<b>Bioinformatics and Big data</b>	
	BIF566	<b>Career Development and Business</b>	
		Total Credits	26
<b>Semester 4</b>			
1	BIO599	DISSERTATION/THESIS	10
		Total Credits	10