

**STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI - 600 086**

**M.Sc. DEGREE : BIOINFORMATICS**

**COURSES OF STUDY**

**(Effective from the academic year 2015 - 2016)**

**CHOICE BASED CREDIT SYSTEM**

Subject Code	Title of Course	Credits	Total Hours			Exam Hours	Marks		
			Lecture Hours (L)	Tutorial Hours (T)	Practical Hours (P)		Continuous Assessment	End Semester	Maximum
<b>Semester - I</b>									
15BI/PC/BC14	Biochemistry	4	4	1	0	3	50	50	100
15BI/PC/DB14	Database Management Systems	4	3	1	2	3	50	50	100
15BI/PC/CP14	Programming in C++	4	3	1	2	3	50	50	100
15BI/PC/BP14	Biophysics	4	4	1	0	3	50	50	100
<b>Semester - II</b>									
15BI/PC/MB24	Molecular Biology	4	4	1	0	3	50	50	100
15BI/PC/P122	Molecular Biology Practical	2	0	0	3	3	50	50	100
15BI/PC/BI24	Bioinformatics	4	4	1	0	3	50	50	100
15BI/PC/P222	Bioinformatics Practical	2	0	0	3	3	50	50	100
15BI/PK/SS22	Soft Skills	2	2	0	0	-	50	-	100
<b>Semester - III</b>									
15BI/PC/GP34	Genomics and Proteomics	4	3	1	2	3	50	50	100
15BI/PC/PL34	Perl	4	3	1	2	3	50	50	100
15BI/PC/AB34	Algorithms for Bioinformatics	4	4	1	0	3	50	50	100
15BI/PC/MC34	Molecular modeling and Computer Aided Drug Design	4	3	1	2	3	50	50	100
15BI/PN/SI32	Summer Internship	2	0	0	0	-	50	-	100
<b>Semester - IV</b>									
15BI/PC/CR44	Basics of Clinical Research Management	4	4	1	0	3	50	50	100
15BI/PC/BA44	Advances in Bioinformatics	4	4	0	0	3	50	50	100
15BI/PC/DS49	Dissertation	9	0	0	12	-	50	50	100
<b>Electives Offered to Parent Department</b>									
15BI/PE/BM14	Basic Mathematics	4	4	0	0	3	50	50	100
15BI/PE/CG14	Cell Biology and Genetics	4	4	0	0	3	50	50	100
15BI/PE/RM14	Research Methodology and Scientific Communication	4	4	0	0	3	50	50	100
15BI/PE/CI14	Cheminformatics	4	4	0	0	3	50	50	100
15BI/PE/DM14	Data Mining	4	4	0	0	3	50	50	100
15BI/PE/IM14	Immunoinformatics	4	4	0	0	3	50	50	100
<b>PG Electives Offered to Other Departments</b>									
15BI/PE/PG24	Pharmacogenomics	4	4	0	0	3	50	50	100
15BI/PE/FB34	Fundamentals of Bioinformatics	4	4	0	0	3	50	50	100

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<b>Social Awareness Programme / Service Learning (SAP/SL)</b>									
15BI/PA/SE12	Socio Economic Issues	2	2	0	0	-	50	-	100
15BI/PA/HH12	Health and Hygiene	2	2	0	0	-	50	-	100
15BI/PA/CW12	Child Welfare	2	2	0	0	-	50	-	100
15BI/PA/CD12	Care of the Differently Abled	2	2	0	0	-	50	-	100
15BI/PA/CA12	Civic Awareness	2	2	0	0	-	50	-	100
15BI/PA/RR12	Rural Realities - Village Visits	2	2	0	0	-	50	-	100
15BI/PA/UR12	Urban Realities - Underdeveloped Areas (Slums)	2	2	0	0	-	50	-	100
15BI/PA/WA12	Welfare of the Aged	2	2	0	0	-	50	-	100
<b>Independent Elective Courses</b>									
15BI/PI/PT24	Python	4	0	0	0	3	-	100	100
15BI/PI/SB34	Systems Biology	4	0	0	0	3	-	100	100