

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI 600 086

M.Sc. DEGREE : BIOINFORMATICS

COURSES OF STUDY

(Effective from the academic year 2019-2020)

CHOICE BASED CREDIT SYSTEM

C-Credit, L-Lecture Hours, T-Tutorial Hours, P- Practical Hours, Ex-Exam Hours, CA- Continous Assessment Marks, ES-End Semester Marks, M-Maximum Marks										
Subject Code	Title of Course	C	L	T	P	Ex	CA	ES	M	
SEMESTER-I										
19BI/PC/BM14	Biomolecules and Biochemistry	4	4	1	0	3	50	50	100	
19BI/PC/EB14	Essentials of Bioinformatics	4	4	0	2	3	50	50	100	
19BI/PC/CP14	Programming in C++ and Perl	4	3	0	2	3	50	50	100	
19BI/PC/DB14	Database Management Systems	4	3	0	2	3	50	50	100	
	Department Elective I									
	SAP / SL	2	2	0	0	-	-	50	100	
SEMESTER-II										
19BI/PC/MB24	Molecular Biology	4	4	1	0	3	50	50	100	
19BI/PC/P122	Molecular Biology-Practical	2	0	0	3	3	50	50	100	
19BI/PC/GP24	Genomics and Proteomics	4	3	0	2	3	50	50	100	
19BI/PC/RM24	Research Methodology	4	4	1	0	3	50	50	100	
	Department Elective II									
	Common Elective I									
CD / ET	Value Education	2	2	0	0	-	-	50	100	
19BI/PK/SS22	Soft Skills	2	2	0	0	0	50	0	100	
SEMESTER-III										
19BI/PC/PR34	Python and R Programming	4	4	1	0	3	50	50	100	
19BI/PC/P232	Python and R Programming-Practical	2	0	0	3	3	50	50	100	
19BI/PC/AL34	Algorithms for Bioinformatics	4	4	1	0	3	50	50	100	
19BI/PC/MC34	Molecular Modeling and Computer Aided Drug Deisgn	4	4	1	0	3	50	50	100	
19BI/PC/P332	Molecular Modeling and Computer Aided Drug Design-Practical	2	0	0	3	3	50	50	100	
	Common Elective II									
CD / ET	Value Education	2	2	0	0	-	-	50	100	
19BI/PN/SI32	Summer Internship	2	0	0	0	0	50	0	100	
SEMESTER-IV										
19BI/PC/AB44	Advances in Bioinformatics	4	4		0	3	50	50	100	
19BI/PC/BD44	Big Data Analysis	4	4	1	0	3	50	50	100	
19BI/PC/P442	Advances in Bioinformatics-Practical	2	0	0	3	3	50	50	100	
19BI/PC/DS47	Dissertation	7	0	0	9	0	50	50	100	
	Department Elective III									
Postgraduate Elective Courses Offered to Parent Department										
19BI/PE/CG15	Cell Biology and Genetics	5	4	1	0	3	50	50	100	
19BI/PE/BS15	Biomathematics and Biostatistics	5	4	1	0	3	50	50	100	
19BI/PE/DM15	Data Mining	5	4	1	0	3	50	50	100	
19BI/PE/IM15	Immunoinformatics	5	4	1	0	3	50	50	100	
19BI/PE/CR15	Basics of Clinical Research Management	5	4	1	0	3	50	50	100	
19BI/PE/CI15	Cheminformatics	5	4	1	0	3	50	50	100	
19BI/PE/BP15	Biophysics	5	4	1	0	3	50	50	100	

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI 600 086

M.Sc. DEGREE : BIOINFORMATICS

COURSES OF STUDY

(Effective from the academic year 2019-2020)

CHOICE BASED CREDIT SYSTEM

C-Credit, L-Lecture Hours, T-Tutorial Hours, P- Practical Hours, Ex-Exam Hours,

CA- Continous Assessment Marks, ES-End Semester Marks, M-Maximum Marks

Postgraduate Elective Courses Offered to Other Departments									
19BI/PE/IB23	Introduction to Bioinformatics	3	3	0	0	3	50	50	100
19BI/PE/AP23	Applications of Bioinformatics	3	3	0	0	3	50	50	100
19BI/PE/CD23	Computer Aided Drug Design	3	3	0	0	3	50	50	100
Independent Elective Courses									
19BI/PI/PG24	Pharmacogenomics	4	0	0	0	3	0	100	100
19BI/PI/SB24	Systems Biology	4	0	0	0	3	0	100	100