



SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED
SUB-CENTRE LATUR
SCHOOL OF TECHNOLOGY

Course Structure: M.Sc. Bioinformatics

Duration: 2 Years

Semester	Course Code	Title of the Paper	No. of Credit
First Year			
First Semester	BIM -101 (T)	Genetics and Molecular Biology	4
	BIM-102 (T)	Bioinformatics	4
	BIM-103 (T)	Biostatistics	4
	BIM-104 (T)	DBMS Oracle	4
	BIM-105 (T)	Linux	4
	BIM -102 (P)	Bioinformatics	2
	BIM -103 (P)	Biostatistics	2
	BIM-104 (P)	DBMS Oracle	2
	BIM-105 (P)	Linux	2
Total Credits			28
Second Semester	BIM-201 (T)	Advanced Molecular Biology	4
	BIM-202 (T)	Computational Biology	4
	BIM-203 (T)	Immunoinformatics	4
	BIM-204 (T)	Chemoinformatics	4
	BIM-205 (T)	Machine Intelligence in Bioinformatics	4
	BIM -203 (P)	Immunoinformatics	2
	BIM-204 (P)	Chemoinformatics	2

	BIM -205 (P)	Machine Intelligence in Bioinformatics	2
	BIM -206 (P)	Numerical Methods and Optimization Techniques	2
Total Credits			28
Second Year			
	BIM-301 (T)	Computer Aided Drug Design	4
Third Semester	BIM-302 (T)	Object Oriented Programming (OOPS) JAVA	4
	BIM-303 (T)	Microbial Genomics	4
	B IM-304 (T)	Principle of Drug Action	4
	B IM-305 (T)	Molecular Modeling	4
	BIM -301 (P)	Computer Aided Drug design	2
	BIM -302 (P)	Object oriented Programming (OOPS) JAVA	2
	BIM -303 (P)	Microbial Genomics	2
	BIM -304 (P)	Perl for Bioinformatics	2
Total Credits			28
Fourth Semester	BIM-401 (T)	Plant Genomics	4
	BIM-402 (T)	Metabolomics and Metabolic Engineering	4
	BIM-403 (T)	Oncogenomics and Cell Signaling	4
	BIM-404 (T)	IPR and Industrial Psychology	4
	BIM -405 (PJ)	Project *	8
	BIM -401 (P)	Plant Genomics	2
	BIM-402 (P)	Metabolomics and Metabolic Engineering	2
Total Credits			28

* STUDENTS ARE SUPPOSED TO CONDUCT EXPERIMENTAL OR COMPUTER BASED PROJECT WORK AT DIFFERENT INSTITUTES UNDER EXTERNAL AS WELL AS INTERNAL SUPERVISORS.