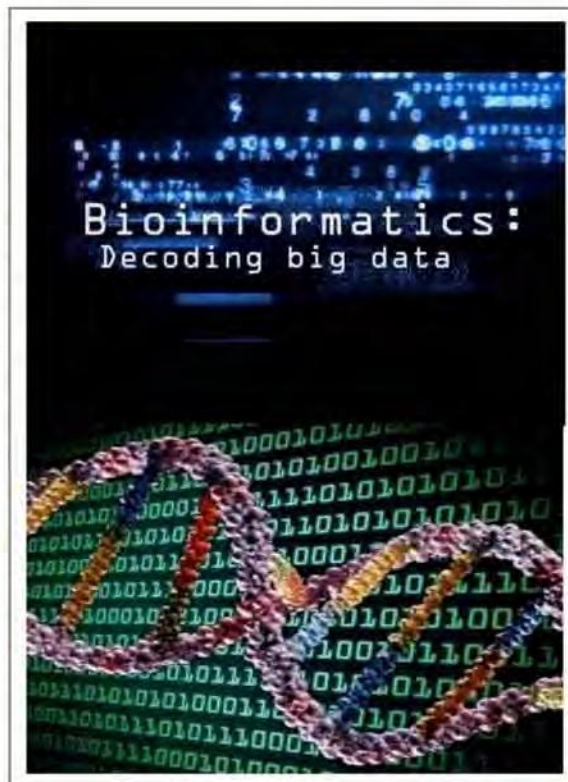


Bioinformatics

Bioinformatics is managing of biological information using computer technology. Computers are used to gather, store, analyze and integrate biological and genetic information which can then be applied to gene-based drug discovery and development. It is an interdisciplinary research field that combines biology, computer science, mathematics and statistics into a broad-based field that will have profound impacts on all fields of biology. The field of Bioinformatics focuses on developing and applying computationally intensive techniques to quickly and efficiently study heap of genomic information, chemical structure and other biological data. Over the past few decades rapid developments in all the Omics and Information technology have been combined to produce a tremendous amount of information related to molecular biology. The scope of bioinformatics is in areas like database design and maintenance, sequence assembly, proteomics, clinical pharmacologist, sequence analysis, informatics developer and bio-analytics. Excellent job opportunities are available in Biotech and Pharmaceutical companies in India,



[Second Year]

Semester- 3		
Core Courses		
Computer Science	1.	Problem Solving Methodology and Programming in C
	2.	Computer Fundamentals
	3.	Practicals
Bioinformatics	1.	Basics in Bioinformatics
	2.	Cell Biology and Genetics
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4		
Core Courses		
Computer Science	1.	Web Designing and Application using HTML
	2.	Computer Networking and Internet
	3.	Practicals
Bioinformatics	1.	Bioinformatics Sequence Analysis
	2.	Biochemistry
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5		
Core Courses		
Bioinformatics	1.	Visual Programming
	2.	Object Oriented Programming and Data Structure
	3.	Basics of Immunology
	4.	Genetic Engineering- 1
	5.	Bioinformatics Applications-I
	6.	Structural Bioinformatics and RDBMS-I
	7.	Practicals (Paper 1 & 2)
	8.	Practicals (Paper 3 & 4)
	9.	Practicals (Paper 5 & 6)

Semester- 6		
Core Courses		
Bioinformatics	1.	Web application Development using PERL
	2.	Object Oriented Programming using JAVA
	3.	Advanced Immunology
	4.	Genetic Engineering-II
	5.	Bioinformatics Applications- II
	6.	Structural Bioinformatics and RDBMS-II
	7.	Practicals (Paper 1 & 2)
	8.	Practicals (Paper 3 & 4)
	9.	Practicals (Paper 5 & 6)