

**Centre for Health Science and Technology,
JIS Institute of Advanced Studies and Research Kolkata
Syllabus for Advanced Diploma in Bioinformatics
Academic Year 2021 – 2022**

Semester 1

Course Code	Course Name	Credit
ABI1001	Statistics and Data Analysis	3
ABI1002	Research Proposal (Bioinformatics)	2
ABI1003	Fundamentals of Bioinformatics	3
ABI1004	Biochemistry of Macromolecules	2
ABI1005	Cell and Molecular Biology	2
ABI1006	Systems Biology and Biological Networks	2
ABI1007	Structural Bioinformatics	3
ABI1101	Using R for Data Science	3
ABI1102	Bioinformatics Programming	4
Total		24

Semester 2

Course Code	Course Name	Credit
ABI2001	Next Generation Genomics	3
ABI2002	Comparative and Evolutionary Genomics	4
ABI2003	Molecular Modeling and Drug Design	3
ABI2004	Functional Genomic Technologies	2
ABI2005	Machine learning and complex biological data	2
ABI2101	Introduction to web site and database design	4
ABI2201	Research Proposal (Bioinformatics)	6
Total		24