Skill Enhancement Course

Semester in which the course will be offered: IIIrd Semester
Course Title: Molecular data Analytics
Course Credits: 2 (0+2)

Objectives

To help the student to achieve soft skill for handling biological data and its analysis

Practical

- Collection of data
- Tabular representation of data
- Graphical representation of data
- Use of MS- Excel for data analysis
- Preparation of binary data after Gel electrophoresis
- DNA Marker parameter analysis with binary data using MS-Excel
- Cluster Analysis using binary data
- Biological Database Searching: NCBI, PDB
- Database Similarity Searching: BLAST
- Pair wise Sequence Alignment tools: EMBOSS
- Multiple Sequence Alignment tool: Clustal Omega
- Tools for DNA Sequence analysis
- Tools for Protein sequence analysis
- Visualization tools for Protein 3D structure