

# Bioinformatics

(Course duration: 45days)

## **COURSEWORK**

**Introduction to Bioinformatics and overview of Biological Research**

**Biological databases and database searching**

**Data Mining and Sequence Retrieval**

**Motif & Domain assignment**

**Proteomics**

**Protein threading and interaction**

**Pair wise and Multiple Sequence Alignment**

**Sequence Analysis (BLAST, FASTA, CLUSTAL W)**

**Phylogenetic analysis**

**Ab initio structure prediction**

**Visualization tools**

**Other relevant Confirmatory Tools**

**Homology Modeling**

**Research project**