



SciFixia

Innovations through Skills and Data

Advanced Bioinformatics Program

Comprehensive Hands On Training in Bioinformatics

*A practical approach to understanding biological data through
Computational and statistical analysis.*

About Us

SciFixia is a Pune-based learning hub offering **practical, industry-oriented training in Life Sciences and Information Technology**. We focus on **hands-on, on-job learning** using real data, real tools, and real-world problem solving.

Our certified programs help learners build strong **technical skills, analytical thinking, and industry readiness** through interactive and application-driven training.

At **SciFixia**, we are committed to making quality education accessible and preparing future-ready professionals for today's evolving industries.

Duration – 1 Month (120hrs)

Mode – Online

Days – Monday to Friday

**Fees :
2200/- Only**

Why Choose SciFixia ?

Real-time industry training :

- Learn practical skills aligned with current industry standards and research needs.

Hands-on with real datasets :

- Work directly on real-world biological and genomic data.

Genomics & computational biology focus :

- Specialized training designed for modern bioinformatics careers.

Online sessions :

- Interactive live classes conducted.

Certification with job-ready skills :

- Receive a recognized certificate with practical, career-focused expertise.

Detailed Syllabus :

Hands-on training with real datasets & tools

Module 1 – Sequencing Revolution: Fundamentals of NGS

- Introduction to NGS and its evolution
 - Types of NGS Platforms
 - Understanding sequencing workflow
 - NGS Data Formats
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Module 2 – Precision Genomics: Variant Discovery & Analysis

- Linux Basics
 - Data Retrieval & Quality Control
 - Alignment & Post-processing
 - Variant Calling using GATK
 - Annotation
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Module 3 – Amplicon Metagenomics Analysis Using QIIME2

- Introduction to Metagenomics
 - Types of Metagenomics
 - Data Quality Control
 - QIIME2 Installation and Setup
 - Data Importing
 - Denoising
 - Taxonomic Classification
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Module 4 – Computer-Aided Drug Design (CADD) using Pyrax

- Theory, Overview and Pre Requisite Installation
- Ligand Preparation and ADMET Analysis
- Protein Downloading and Preparation
- Docking
- Interaction Visualisation

Module 5 – In Silico Drug Discovery using AutoDock

- Introduction to Molecular Docking
 - Protein Structure Preparation
 - Ligand Preparation
 - Grid Box Setup
 - Molecular Docking Execution
 - Result Analysis & Visualization
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Module 6 – Mini Project & Research Writing Overview

- Hands-on Mini project
- Reporting Writing
- Research Writing Skills

Learning Outcomes

By the end of this internship, participants will be able to:

- **Hands-on experience** with real biological datasets
- Understanding of **NGS workflows**
- Proficiency in **Linux** commands for **bioinformatics pipelines**
- Ability to perform **variant analysis & interpretation**
- Exposure to **metagenomics** and **drug discovery techniques**
- Mastery of tools for **ligand and protein preparation**
- **Industry-relevant tool** experience
- Professional **research writing skills** for reports and papers

Scan Here for Details & Registration :



Start Your Journey in Bioinformatics with SciFixia

Enhance your knowledge. Build practical skills. Explore real biological data.

Join SciFixia and take your first step towards a career in Bioinformatics and Computational Biology.