Course D	Academic Projects at Malkolak Institute of Life Sciences	Duration: 1 – 6 months

Broad Topics for Research at MILS

1) Sequence analysis and protein modeling methods

2) Receptor–Ligand interactions (Docking/Scoring functions)

3) Dynamic behavior of the Macromolecules (Molecular Dynamics).

4) Quantitative Structure Activity Relationship (2D/3D QSAR).

5) Autoimmune Disorders, Cancer, Metabolic Disorders like Diabetes,

6) Neurological Disorders, Systems Biology, Metabolic Engineering

7) 3D Pharmacophore Modeling and QSAR

8) Biological Pathway Modeling and Algorithm Development,

9) Insilco Database Screening.

10) Binding Free Energy Calculations (Molecular mechanics).

11) Protein Homology Modeling (Comparative modeling).

12) Structure Based Drug Designing.

13) Insilico ADME/Tox prediction.

14) Clinical trials analysis using SAS software

15) Pharmacoinformatics application methods

16) SAS applications in Bioinformatics

17) SAS applications in pharmaceuticals

10) SAS applications in Biotechnology

We have the technical expertise to apply latest bioinformatics, Molecular modeling, Computer aided drug designing methods in above-mentioned fields.