



Indian Institute of Science Centre for Continuing Education



PROFICIENCY COURSES JANUARY–MAY 2026

Structural Biology and Drug Discovery

Course Coordinator Dr. Mahavir Singh ,MBU,IISc

Dr. Somnath Dutta ,MBU,IISc



Eligibility

M.Pharm./B.Pharm., B.Tech./M.Tech. in Biotechnology or Bioinformatics, R&D Scientists/Professionals in Pharmaceutical and Biotech Industries, Clinical Researchers, Bioprocess Development Engineers, and AI/ML Engineers in Drug Discovery Postgraduate (M.Sc./M.Tech./Ph.D.) and/or Advanced Undergraduate

Objectives :

The aim of this course is to provide students with a comprehensive understanding of the structural and functional principles of biological macromolecules and their roles in drug discovery. Students will learn to interpret and analyze macromolecular structures using various experimental and computational tools, as well as the rational design of protein-targeted therapeutics and vaccines.

Syllabus :

The course covers fundamentals of protein, DNA, RNA structures; methods in structural biology, like AI-based structure prediction tools, experimental methods, like X-ray crystallography, cryo-EM, NMR; computational tools for molecular modeling and docking; principles of protein-ligand and protein-inhibitor interactions and biophysical approaches to understand these interactions; applications of structure-based approaches in modern drug discovery and vaccine development.

More Details <https://cce.iisc.ac.in/cce-proficiency/>

Course Fee per participant:

INR 10000 + GST

Application Fee per participant:

INR 300 + GST

Course Schedule

Start Date 12 January, 2026

Monday, 6–8 pm (2 hours)

Mode: Online

Scan here to apply



Contact us

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