



**Indian Institute of Science
Centre for Continuing Education**



ONLINE SHORT TERM COURSE

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/self-support-courses/>

Course Fee per participant:

INR 10000 + GST

Scan here to apply

Contact us

Course Schedule

Start Date 17 January, 2026

(32 Hrs Course)

Monday, 6-8 pm

Saturday (11 am to 1 pm)

Mode: Online



**Centre for Continuing Education
Indian Institute of Science
Bengaluru 560 012, INDIA.**

Phone: 080 2293 2055/2491/2247