



**Dr.Omics** **Labs**  
The Doctor of your DNA

# DRUG DESIGN MASTERY

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**A 2-Month** Research Expedition  
in CADD

[WWW.DROMICSEDU.COM](http://WWW.DROMICSEDU.COM)

YOUR GO TO

## With Dr.Omics Labs

### COMPREHENSIVE AND SPECIALIZED TRAINING

- MODULES COVERING KEY AREAS OF COMPUTATIONAL RESEARCH.
- HIGHLY PROFESSIONAL COURSES FOR COMPUTER AIDED DRUG DESIGNING TECHNIQUES & PROGRAMMING FROM BASICS.



### EXPOSURE TO INDUSTRY PRACTICES AND INSIGHTS INTO THE COMMERCIAL ASPECTS OF BIOTECH RESEARCH

- AN INDUSTRIAL LEVEL COURSE DESIGN.
- COVERING EVERY TOPIC REQUIRED FOR COMPUTATIONAL DRUG DESIGNING & PROVIDING HANDS-ON PRACTICE DURING SESSION

### MENTORSHIP FROM INDUSTRY EXPERTS AND RENOWNED RESEARCHERS.

- LIVE LEARNING WITH HANDS-ON PRACTICAL EXPERIENCE, UNDERSTANDING USAGE OF BIOINFORMATICS DATABASES IN REAL-TIME.
- IDENTIFY DRUG TARGETS, ANALYZE MOLECULAR DOCKING AND BINDING MODES, INVESTIGATE DRUG REPOSITIONING AND DESIGN NEW DRUGS.



### NETWORKING

- OPPORTUNITY TO CONNECT WITH PEERS, INDUSTRY PROFESSIONALS, AND POTENTIAL COLLABORATORS.
- A COLLABORATIVE AND INTERACTIVE LEARNING ENVIRONMENT THAT FOSTERS CREATIVITY AND INNOVATION.

## CADD: Research Oriented Course

"Explore the forefront of proteomics and bioinformatics with our CADD Research Oriented Course at Dr.Omics Labs. Gain hands-on expertise in drug designing techniques and MD Simulation, propelling your career or research to new heights in the field of proteomics."



### *Important Tip*

"Select a topic that really interests you and join our research-oriented course made for passionate learners. Our flexible schedule is made to fit your time."

### **A 6-Month CADD Research Journey:**

A CADD (Computer-Aided Drug Design) research-oriented course offers a comprehensive exploration of computational methods used in drug discovery. Students delve into molecular modeling, ligand-receptor interactions, and virtual screening, equipping them with valuable skills to contribute to pharmaceutical research. This course fosters a deep understanding of the intersection between chemistry, biology, and cutting-edge computational tools.



## **COURSE OVERVIEW**

# **Computer Aided Drug Design (CADD)**

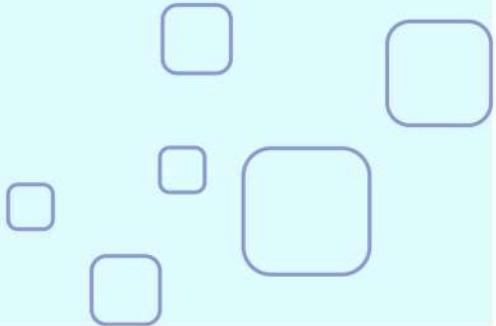
- **Introduction to Drug Discovery and Computer Aided Drug Design**
  - Overview of drug discovery process
  - Role of computational methods
  - Hands-on: Introduction to ChemDraw or ChemSketch for chemical structure visualization.
- **Molecular Biology Fundamentals for Drug Design**
  - Biomolecules and their properties
  - Structure of proteins and ligands
  - Hands-on: Utilize PyMOL or Swiss PdbViewer for protein structure visualization.
- **Molecular Modeling Techniques**
  - Molecular visualization tools
  - Molecular mechanics and dynamics simulations
  - Hands-on: Use PyMOL, UCSF Chimera, or VMD for molecular visualization.
- **Chemical Informatics and Virtual Screening**
  - Chemical databases and data mining
  - Ligand and structure-based virtual screening
  - Hands-on: Explore tools like PubChem for chemical data and Autodock Vina for virtual screening





## *Program Structure*

- Duration: 2 months



## **Gain expertise in CADD techniques**

### **1.5 Months of In-Depth Learning**

- Molecular modeling
- Virtual screening
- Drug-target interaction analysis
- Pharmacokinetics and pharmacodynamics



## FREQUENTLY ASKED QUESTIONS

**Q: Are these courses suitable for those new to the field without prior experience?**

A: Yes, our courses are designed to cater to beginners with no prior experience in the field. We provide foundational content suitable for all skill levels.

**Q: Will I receive a certification upon completing the course?**

A: Absolutely, a digital certificate will be awarded upon course completion. You'll receive this certificate via email.

**Q: Do the courses include practical projects and research opportunities?**

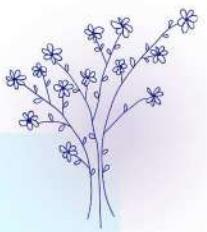
A: Certainly, our courses incorporate practical projects and research opportunities to ensure hands-on learning and the practical application of acquired knowledge.

**Q: Can I access class recordings if I miss a class?**

A: Yes, class recordings are available. We'll send you the recording link via email if you miss a class, typically on the day following the live session.

**Q: Can I continue to access course materials and resources after finishing the course?**

A: Absolutely, you'll retain access to course materials and resources even after completing the course. These materials will be shared with you via email or WhatsApp.



## **TERMS AND CONDITIONS**

- Maintaining Discipline during the Tenure.
- It is mandatory to maintain 85% attendance for all students.
- Students must maintain an average 'A2' grade throughout their training period.



Need more insight & support?

## CONTACT US!



602/e, W No 3, G/f, L/side, Seqno-m, H 3/727 Gadaipur New Delhi,  
South-West Delhi-110030.

*Thank you!*



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### OUR CERTIFICATIONS & GRANTS

