

Electronics & ICT Academy IIT Roorkee

One Week Short Course/FDP
on

" Computational Biology and Translational Bioinformatics"

Recognized by AICTE at par with
QIP for recognition/credits



Sept. 30-Oct. 04, 2019

Experts from Academia

Prof. Deepak Sharma, IIT Roorkee

Prof. Andrew Lynn, SC&IS, JNU

Principal Investigator (E&ICT Academy
IIT Roorkee): Prof. Sanjeev Manhas

Certificates to participants by
E&ICT Academy IIT Roorkee

Supported by

Ministry of Electronics & Information
Technology Government of India



Venue

E&ICT Academy(N-321), ECE
Department, Indian Institute of
Technology Roorkee

Why Computational Biology?

- With the copious amount of genomic and experimental data being generated, the imperative to follow bioinformatics-guided research has never been greater.
- An integral component of the medicine and health care.
- An essential requisite to understand the biological systems and relationships by developing novel algorithms.

Benefits and Outcomes of the Course

- This course will be beneficial for both absolute beginners and skilled programmers.
- Overview of key concepts and code snippets with suitable examples.
- This course is designed to gain expertise in developing new algorithms and computational analysis of biological data.

Program Features

- The program is split into lectures and labs/hands-on sessions.
- Hands-on experience on basic and advanced-level topics.
- Interaction & learning with experts from academia.
- Certificates to participants by E&ICT Academy IIT Roorkee.



Objective of the Course

- To get exposure and gain knowledge about the diverse facets of computational biology (fundamentals of bioinformatics, developing algorithms, data analysis and translational bioinformatics).

Focus Areas

- Basics of Linux.
- Python – Introduction, Loops, Functions, Scoping, Modules, File Handling and Structured Objects.
- Medical Informatics and Text Mining.
- Systems Biology, Big Data and Biomarker Discovery.
- NGS assembly, annotation, abundance estimation, differential expression analysis and variant calling.
- Molecular Dynamics Simulation and Analysis.
- Homology structural modeling, Docking and Virtual Screening (Evaluation of compound libraries for drug discovery).
- Various useful web servers and databases (for instance, InterProScan, CASTp, TMPred, GENSCAN, AUGUSTUS etc).

Coordinators

Prof. Sanjeev Manhas
Principal Investigator E&ICT Academy
IIT Roorkee

Prof. Deepak Sharma
Department of Biotechnology
IIT Roorkee

Who Can Attend ?

Program is open to faculty members/research scholars/PG students from colleges/universities, and industry personnel working in the concerned/allied discipline.

Registration Fee

Faculty members: ₹ 1000/-

Research scholars: ₹ 3000/-

Persons from Industry: ₹ 3,000/-

How to make payment

Offline: DD in favor of "Dean SRIC IIT Roorkee" payable at Roorkee
"OR"

Online: (<https://www.onlinesbi.com/prelogin/icollecthome.htm?corpID=365641>)

Read the instruction for payment before filling the online registration form.

How to Apply

Step 1: Make Payment

Step 2: Participants may fill registration form through Academy website (<http://eict.iitr.ac.in>).
OR

Step 2: Send a duly filled-in registration form along with Demand Draft to Academy address.

Mr. Prateek Sharma, EICT Academy, ECE Department, IIT Roorkee-247667

Important Dates

**Last Date For
Registration :
September 20, 2019**

EICT Academy IITR

Electronics and ICT Academy (E&ICT) at IIT Roorkee (funded by Ministry of Electronics and Information Technology) aims to enrich and upgrade teaching and research competences of engineering faculties of institutes/colleges by conducting courses and workshops in fundamentals as well as emerging areas of E&ICT and enabled areas. The programs are conducted by well-known industry partners, resource persons from leading academia and experts from renowned R&D organizations.



Activities of the Academy

- Conduct one week short courses/FDPs with emphasis on hands-on learning in basic/advanced topics, and emerging technologies in the E&ICT domain.
- Set up the activity centers to conduct one week short courses/FDPs locally at institutes/colleges.
- Continuing Education Programs for engineering graduates and working professionals to enhance their knowledge, technical skills and employability.
- Design, development, and delivery of specialized modules specific to research areas and industry.

One Week Short Course/FDP on "Computational Biology and Translational Bioinformatics"



Dates: Sept.30- Oct 04, 2019

REGISTRATION FORM

Applicant Name _____

Gender: _____

Category (GEN/OBC/SC/ST): _____

Designation: _____

Name and Address of the
Organization/Institute: _____

City/Town: _____

Email: _____

Phone Number: _____

Do you need Accommodation?
(Yes/No): _____

DD Number: _____

Date: _____

Issuing Bank: _____

Payable at: _____

Signature of the Applicant

Contact Us

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