



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

**School of Bio and Chemical Engineering
Department of Bioinformatics**

Date: June 23, 2020

STUDENTS CIRCULAR

Ref No: SIST / Bioinfo / Odd - sem / VAC / June 23, 2020

Dear Students,

This is to inform you that the following courses are being offered to students under the value-added certificate courses category for this academic year. Students belonging to the I year to the III of B. Sc and I and II year of M. Sc are welcome to enroll in these courses. The duration of every course is 30 hours. On completion of the course you will obtain a certificate of accomplishment.

S. No	Name of the course	Faculty Coordinator
1	Effective communication skills (September 21 – October 29, 2020)	Dr. Monica & Dr. Jemmy Christy
2	Basics of Matlab (Nov-Dec 15th 2020)	Dr. Swetha Sunkar
3	NGS Data Analytics – Workshop (Jan - Feb 2021)	Dr. D. Alex Anand.

Venue

Biocomputing Lab, Department of Bioinformatics.

The last date for enrollment is - Closes 07 days before the start of each course.

HOD

Dr.H.Jemmy christy

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School of Bio and Engineering classrooms

Heads of School of Bio and Engineering classrooms

HEAD OF THE DEPARTMENT
DEPARTMENT OF BIOINFORMATICS
SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
Jeppiyaar Nagar, Rajiv Gandhi Salai
Chennai - 600 149



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**Department of Bioinformatics &
The Centre for Molecular Data Science and Systems Biology**

Presents

Effective communication skills - 2020



September 21 – October 29rd 2020

**Faculty Co - ordinator - Dr. Jemmy Christy | &
Dr. Monica (Department of English)**

EFFECTIVE COMMUNICATION SKILLS - 2020
LANGUAGE LAB for English – Beginner to Advanced

September 21 – October 29rd 2020

Day	Module	Topic
21-9-2020	Module 1	Module objectives and outcomes
22-9-2020	Module 2	Speaking for better communication
23-9-2020	Module 3	Speaking about Myself
24-9-2020	Module 4	Sharing Personal Information
25-9-2020	Module 5	Speaking accurately
28-9-2020	Module 6	Pronouncing Diphthongs accurately
29-9-2020	Module 7	Working with silent letters
30-9-2020	Module 8	Poem for Stress Practice
1-10-2020	Module 9	Practice for Public Speaking
5-10-2020	Module 10	Practicing for Language Debate
6-10-2020	Module 11	Speaking Extempore
7-10-2020	Module 12	Structure of Debate
8-10-2020	Module 13	Qualities necessary for Effective Presentation
9-10-2020	Module 14	Taking Part in Group Discussions
12-10-2020	Module 15	Extempore Speech: My Favorite Speech
13-10-2020	Module 16	Speaking Extempore Effective Strategies
14-10-2020	Module 17	Making an Apology
15-10-2020	Module 18	Asking for Clarifications
16-10-2020	Module 19	Describing Objects - Pictures
17-10-2020	Module 20	Describing Objects - Descriptions
19-10-2020	Module 21	Practicing Narrative Skills : Story and Event
20-10-2020	Module 22	Reporting on an Event - Video
21-10-2020	Module 23	Guidelines on the Language of Reporting
22-10-2020	Module 24	Social Communication
23-10-2020	Module 25	Performing Language Functions
24-10-2020	Module 26	List of Useful Expressions
26-10-2020	Module 27	Shapes to Describe
27-10-2020	Module 28	Defining with Illustrations
28-10-2020	Module 29	Speaking Across the Curriculum
29-10-2020	Module 30	Matching the Definitions

Coordinators: Dr Jemmy Christy & Dr. Monica (Department of English)

EFFECTIVE COMMUNIATION SKILLS
LANGUAGE LAB for English – Beginner to Advanced

September 21 – October 29rd 2020

S. No	Name
1.	Krishnajayashri G
2.	Dinesh Kumar
3.	S. Iyappan
4.	Remya R.R
5.	Preetha
6.	Sridevi Sangeetha
7.	Harini R
8.	Padma Krishnan
9.	S Amutha
10.	Monisha J
11.	D.Baskaran
12.	Jones Eben Raj T
13.	Hetty Markose
14.	Binu Sahayam D
15.	Preetha
16.	Abiramy
17.	Sharon Chris Hepzebah P.
18.	R.Vijayashanthi
19.	Harini R
20.	Jones Eben Raj T
21.	Preetha
22.	Muthukani. M
23.	Preetha
24.	Shijitha R
25.	P.Georgia Chris Selwyna
26.	Yaminipriya S
27.	K Veena Gayathri
28.	V.Ramakrishnan
29.	Karolinekersin
30.	R. Vijayashanthi
31.	Preetha
32.	Preetha
33.	Shalini Rai
34.	Aswini A
35.	Delhiraj N

36.	R. Jeyapandi
37.	Rahul lodha
38.	Subhash l kakad
39.	Preetha sathyanarayanan
40.	Harini R
41.	Ezhil malar s
42.	Helan soundra rani
43.	Kumarasamy Y

44.	Potti Bhoomika Lekhya
45.	Bhuvanesh. P
46.	Britlin Deva Jebasta. N
47.	Chandini Sengupta
48.	Deeksha. R. V
49.	Devipriya. V
50.	Dhana Sri. C . K

Effective Communication Skills - Report

Getting your message across in a way that is clear and coherent is a critical skill in your professional and personal life. This workshop identifies the necessary ingredients of any conversation. Learn to be a better communicator by exploring the communication process and how different communication styles affect your personal style.

This workshop is idea for students and research scholars.

Through Communicate with Others, you will:

- Become a better communicator by examining the four key ingredients to any conversation
- Appreciate the art of conversation through the role of speaker, listener and observer
- Create the best possible climate for communicating through empathy, asking the right questions and understanding the person's viewpoint
- Understand how non-verbal communication and feedback influence how your message comes across



SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

**Department of Bioinformatics &
The Centre for Molecular Data Science and Systems Biology**

Effective Communication Skills - 2020

CERTIFICATE OF PARTICIPATION

This is to certify that

Monisha J

has participated in the Hands on Training workshop on "Effective Communication Skills - 2020" that was held from the September 21 – October 29rd 2020.

DR. V. RAMESH KUMAR
Convener

DR. JEMMY CHRISTY
Head, Department of Bioinformatics

DR. T. SASIPRABA
Vice Chancellor



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School
Bio and

of

**Chemical Engineering
Department of Bioinformatics**

Date: June 23, 2020

DEPARTMENT CIRCULAR

Ref No: SIST / Bioinfo / Odd - sem / VAC / June 23, 2020

Dear students,

We are pleased to inform you that the following courses are being offered to students under the value added certificate courses category for this academic year. Students belonging to the I year to the III of B. Sc and I and II year of M. Sc are welcome to enroll in these courses. The duration of every course is 30 hours. On completion of the course you will obtain a certificate of accomplishment.

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2	Basics of Matlab (Nov 10 - Dec 15th 2020)	Dr. Swetha Sunkar
3	NGS Data Analytics – Workshop (Jan - Feb 2021)	Dr. D. Alex Anand.

Venue

Biocomputing Lab, Department of Bioinformatics.

The last date for enrollment is - Closes 07 days before the start of each course.

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Department of Bioinformatics &
The Centre for Molecular Data Science and Systems Biology

Presents

BASICS OF MATLAB - A WORKSHOP



10th November - 15th December, 2020

FACULTY CO - ORDINATOR - DR. SWETHA SUNKAR



COL. Dr. JEPPIAAR
Founder Chancellor



Dr. Mariazeena Johnson
Chancellor



Dr. Marie Johnson
President

PATRONS

DR. T. SASIPRABA, M.E., PH.D. VICE - CHANCELLOR, SIST
DR. S. S. RAO, M.B.A., PH.D. REGISTRAR, SIST | DR. E. LOGASHANMUGAM, M.E., PH.D., PRO VICE CHANCELLOR, SIST

Organizing Members - Dr. Jemmy Christy | Dr. Swetha Sunkar | Dr. D. Alex Anand,
Department of Bioinformatics, SIST

Facilitated by - The Students & Faculty, Department of Bioinformatics & CMDSSB

MATLAB for Bioinformatics
(30 module Course)

Module 1	Bioinformatics Toolbox Product Description
Module 1	Matlab - Overview
Module 2	Installation
Module 3	Data Formats and Databases
Module 4	Sequence Alignments
Module 5	Sequence Utilities and Statistics
Module 6	Protein Property Analysis
Module 7	Phylogenetic Analysis
Module 8	Microarray Data Analysis Tools
Module 9	Microarray Data Storage
Module 10	Mass Spectrometry Data Analysis
Module 11	Graph Theory Functions
Module 12	Graph Visualization
Module 13	Statistical Learning and Visualization
Module 14	Prototyping and Development Environment
Module 15	Data Visualization
Module 16	Algorithm Sharing and Application Deployment
Module 17	Exchange Bioinformatics Data Between Excel and MATLAB
Module 18	Get Information from Web Database – Get functions
Module 19	High throughput sequence analysis
Module 20	Working with Large Multi-Entry Text Files
Module 21	Identifying Differentially Expressed Genes from RNA-Seq Data
Module 22	Exploring Protein-DNA Binding Sites from Paired-End ChIPSeq Data
Module 23	Exploring Genome-wide Differences in DNA Methylation Profiles
Module 24	Exploring a Nucleotide Sequence Using Command Line
Module 25	Microarray analysis - Managing Gene Expression Data in Objects
Module 26	Representing Expression Data Values in DataMatrix Objects
Module 27	Representing Experiment Information in a MIAME Object
Module 28	Visualizing Microarray Images
Module 29	Analyzing Gene Expression Profiles
Module 30	Overview of Phylogenetic Analysis

MATLAB for Bioinformatics

Nov 10 - Dec 15th 2020

S. No	Name
1.	Krishnajayashri G
2.	Dinesh Kumar
3.	S. Iyappan
4.	Remya R.R
5.	Preetha
6.	Sridevi Sangeetha
7.	Harini R
8.	Padma Krishnan
9.	S Amutha
10.	Monisha J
11.	D.Baskaran
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14.	Binu Sahayam D
15.	Preetha
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30.	R. Vijayashanthi
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34.	Aswini A

35.	Delhiraj N
36.	R. Jeyapandi
37.	Rahul Lodha
38.	Subhash L Kakad
39.	Preetha Sathyanarayanan
40.	Harini R
41.	Ezhil Malar S
42.	Helan Soundra Rani
43.	Kumarasamy Y

44.	Potti Bhoomika Lekhya
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47.	Chandini Sengupta
48.	Deeksha. R. V
49.	Devipriya. V
50.	Dhana Sri. C . K

MATLAB for Bioinformatics - Report

For Next Generation Sequencing (NGS), microarray analysis, mass spectrometry, and gene ontology, Bioinformatics Toolbox™ offers techniques and applications. You may read genomic and proteomic data from common file formats including SAM, FASTA, CEL, and CDF as well as from online databases like the NCBI Gene Expression Omnibus and GenBank by using toolbox functions. With the help of clustergrams, spatial heatmaps, and sequence browsers, you may study and display this data. Additionally, the toolbox includes statistical methods for peak detection, imputing values for missing data, and feature selection.

To support common bioinformatics workflows, you can mix toolbox functions. You may classify protein profiles using mass spectrometry data, detect copy number variations and SNPs in microarray data, analyse RNA-Seq data to find differentially expressed genes, and identify transcription factors using ChIP-Seq data.

This course attempts to introduce you to the fundamentals of Matlab. In order to give you the confidence to begin utilising Matlab in your own work, we will take a practical approach over the two days of instruction. In particular, we'll demonstrate both how to use pre-written functions and how to develop your own scripts and functions. We will also look at the various ways that Matlab users might get assistance. In order to help you build scripts that are more effective, we will also cover several fundamental computer programming concepts in Matlab.

Prerequisites

There are no prerequisites for this course, and prior programming experience is not required to enrol. The course is not designed for seasoned Matlab users, although participants should ideally plan to utilise Matlab soon following the session.



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Department of Bioinformatics &
The Centre for Molecular Data Science and Systems Biology

MATLAB for Bioinformatics - 2022

CERTIFICATE OF PARTICIPATION

THIS IS TO CERTIFY THAT

ABIRAMY

has participated in the Hands on Training workshop on "MATLAB for Bioinformatics - 2022" that was held from the November 10 - December 15th 2020.

DR. V. RAMESH KUMAR
CONVENER

DR. JEMMY CHRISTY
HEAD, DEPARTMENT OF BIOINFORMATICS

DR. T. SASIPRABA
VICE CHANCELLOR



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School of Bio and Chemical Engineering Department of Bioinformatics

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Dr.H.Jemmy christy

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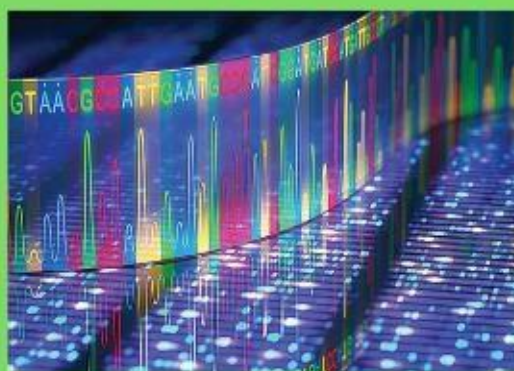


Department of Bioinformatics &

The Centre for Molecular Data Science and Systems Biology

Presents

NGS DATA ANALYTICS WORKSHOP - 2021



January 18 to February 15th, 2021

FACULTY CO - ORDINATOR - DR. D. ALEX ANAND.



COL. Dr. JEPPIAAR
Founder Chancellor



Dr. Mariazeena Johnson
Chancellor



Dr. Marie Johnson
President



Mr. J. Arul Selvan
Vice President



Ms. Maria Bernadette
Tamarasi Johnson
Vice President



Ms. Maria Catherine
Jayapriya
Vice President

PATRONS

Dr. T. Sasi Praba, M.E., Ph.D. Vice-Chancellor, SIST

Dr. S. S. Rao, M.B.A., Ph.D. Registrar, SIST | Dr. E. Loganathanmugam, M.E., Ph.D., Pro Vice-Chancellor, SIST

Organizing Members - Dr. Jemmy Christy | Dr. Swetha Sunkar | Dr. D. Alex Anand,
Department of Bioinformatics, SIST

Facilitated by - The Students & Faculty, Department of Bioinformatics & CMDSSB

**NGS Data Analytics – Workshop
January 18 to February 15th, 2021**

S. No	Name
1.	S.Mahalakshmi
2.	Amreesh Karthikeyan
3.	Poovendiran. P
4.	Sreesuganya K
5.	Yuganthini. R
6.	Anaswara T S
7.	S.P.Vaishali
8.	Elayaraja Dhandapani
9.	R.Poorvaja
10.	Karthick Raja Arulprakasam
11.	K.Gokilapriyavarthini
12.	Keerthana Sree S
13.	Saranya
14.	M. Fathima
15.	Haripriya J
16.	Dhivyaroopa R
17.	Mohanadevi. S
18.	Fathima. M
19.	Vinesh R
20.	Manjithra. M
21.	Malik Basha S
22.	Mary Soumiya M
23.	Monika
24.	S R Bharathkumaar
25.	Akshay Kumar
26.	Maulikkumar Thesiya
27.	Shivanjali
28.	S Sinthuja
29.	Priyankaa.B
30.	Mr. Ojasvi Dutta
31.	M.Kaviya Priya
32.	Selvi S
33.	S.Saivarshini

34.	Sathya
35.	Desam Neeharika
36.	Bashyam Praneetha
37.	Ananya Bajpai
38.	Jamalpur Naveen Kumar
39.	Jamalpur Naveen Kumar
40.	Suryani Guha
41.	Swaralipi Mitra
42.	Refana Shahul
43.	Jaisheela Vimali I

Next Generation Sequencing Workshop - Report

Next-generation sequencing (NGS) technologies are now a crucial component of practically all life sciences research and diagnostics. NGS data are often processed by qualified bioinformaticians because to their volume and, more importantly, complexity. This is also a serious issue for experienced professionals in life sciences who have never studied NGS because it is too new and must suddenly adapt to completely new tools, workflows, and scientific terminology, not to analyse NGS data themselves (after all, that is why we have bioinformaticians), but to ask the right questions and understand the results.

Our session will teach you the fundamentals of NGS data processing. Its purpose is to teach students how to perform the fundamental processes of NGS data analysis, such as raw data manipulation, quality control, and the elimination of low-quality sequences, sequence adapters, artefacts, or other contamination. The end result should be complete mastery of the process, with the output being a set of high-quality data that can be used for further analysis.

You will become acquainted with numerous NGS data formats, learn about the specific benefits and drawbacks of sequencing technologies and how to cope with them, and gain an understanding of the history of individual techniques used to change NGS data. You will not become a bioinformaticist after this three-day training, but you will be well on your way to being **a qualified partner for bioinformaticists on your team.**



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Department of Bioinformatics &

The Centre for Molecular Data Science and Systems Biology

Next Generation Sequencing Workshop - 2021

CERTIFICATE OF PARTICIPATION

THIS IS TO CERTIFY THAT

MARY SOUMIYA M

has participated in the Hands on Training workshop on "Next Generation Sequencing" that was held from the January 18 to February 15th, 2021

DR. V. RAMESH KUMAR
CONVENER

DR. JEMMY CHRISTY
HEAD, DEPARTMENT OF BIOINFORMATICS

DR. T. SASIPRABA
VICE CHANCELLOR