

## SIR M.VISVESVARAYA INSTITUTE OF TECHNOLOGY Bengaluru-562157

## **Department of Electrical and Electronics Engineering**

## **INDEX SHEET FOR CRITERIA 1.2.1**

Sl. No.	Name of SDP/Add on Program /Nptel/Swayam	Date (From-to)	Number of students enrolled for the Course
	One Week Online Short Term Training	05 <sup>th</sup> -10 <sup>th</sup> July,	
1	Program On "Digital Signal Processing and	2021	20
	its applications"		

v.m. par.f. CRITERIA COORDINATOR

HOD

PROF. & READ OEPT. OF ELECTRICAL ENGN VISVESVARATA INSTITUTE OF COMMA Hadovarayanagar, Hunasa Instat Valahanka, Bangalore-Succes

Bengaluru, 30.06.2021

### FROM

Mrs. Anchal Chapra, Asst. professor, Dept. of EEE, Sir M.VIT, Bengaluru.

#### TO

The Principal,

Sir M.VIT, Bengaluru.

Through

The HOD, Dept. of EEE,

Sir M.VIT, Bengaluru.

Respected Sir,

#### Sub: Seeking permission for organizing one week Students training program-Reg

The Dept. of EEE of Sir MVIT, would like to organize a One week short term training program through online mode from 05.07.2021 Monday to 10.07.2021 Saturday. The topic will be "Digital Signal Processing and its applications" which will be covering all the fundamentals of DSP and MATLAB based solutions in Signal and Image processing.

We humbly request you sir to permit for the same and do the needful.

Thanking you.

Yours Sincerely,

Anchel

(Mrs. Anchal Chapra)

Approved by

Anther ye

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadeveravanagar, Hunasomaranahalli, hternational Airport Road, BANGALORE-562 157

Forwarded for kind approval

Bunk PROP. & READ

OEPT. OF ELECTRICAL ENGA VISVESVARATA INSTITUTE OF 1 adovareyeneger, Hunasa Via) Velahanka, Bangalore-So

### Sir M Visvesvaraya Institute of Technology

Krishnadevarayanagar, Bangalore-562157 Karnataka Affiliated to VTU, Belagavi | Approved by AICTE | Accredited by NAAC UGC

Department of Electrical and Electronics Engineering



### Organizes

A Five Day Online Short Term Training Program (STTP) on

### Digital Signal Processing and its Applications (DSP&A-21)

July 05 - 10, 2021

#### **About Sir MVIT**

Sir M Visvesvaraya Institute of Technology is an Institute of repute in the state of Karnataka founded by Sri Krishnadevaraya Educational Trust in 1986. The institute offers nine B.E. degree programs in Civil, Mechanical, Electrical & Electronics, Electronics & Communication, Computer Science & Engg., Industrial Engineering & Management, Telecommunication, Information Science and Bio Technology and four Masters Programs in Computer Applications, Business Administration, Computer Integrated Manufacturing and Electronics. The Institute is affiliated to Visvesvaraya Technological University and approved by All India Council for Technical Education, New Delhi and is accredited by National Board of Accreditation, New Delhi. Sir MVIT is an ISO 9001:2008 Certified Institution. Department of Mechanical Engineering, Department of Electrical & Electronics Engineering, Department of Electronics & Communication Engineering and Department of Biotechnology are declared R&D centers by the university.

Sir MVIT is situated on a vast campus of 133 acres on the Bellary road near Air Force station, Yelahanka, With well qualified and motivated faculty, state-of-art laboratory facilities. For details see our website: https://www.sirmvit.edu/

#### **About Department**

Department of Electrical and Electronics Engineering was established in the year 1987. The department offers four year UG program (B.E). The department is recognized as a centre of excellence in the institute. The department offers a stimulating environment for the students to execute their inhouse project works. The department has a sound infrastructure with well facilitated laboratories and classrooms. The department has well qualified and dedicated faculties with vast experience and diverse specializations. The core competency is mainly in the area of power system, power electronics and drives, signal processing, VLSI, distributed generation systems, etc. Department was recognized as an R&D centre by VTU in the year 2002. The department has successfully carried out funded projects funded by various organisations.

## Preamble

The field of Digital Signal Processing (DSP) is always driven by its applications and advances in its technologies. Hence, challenges are always imposed by them on implementations of DSP systems. Such implementations must deal with noise, latency, speed, cost, area and power constraints of real-time DSP applications. The goal of this STTP is to provide critical concepts in the understanding of the state-of-the-art digital system design and techniques used to filter the signals for applications like Audio, Image, Bio-medical etc. It will cover the concepts from fundamentals to advanced level of filter designing, giving thrust to implementation aspects of DSP filters.

### **Key Highlights**

- This STTP focuses on concepts related analog and digital filter design and implementation.
- Online Lab Sessions related to MATLAB will be conducted.
- Code and PPT will be provided after successful completion.
- Real-time applications of DSP to fields such as biomedical, astro-physics, Audio, Images etc. will be demonstrated.





#### **Course Content**

This Program will cover the following content

- Introduction to Digital Signal Processing
- Basic commands of MATLAB and Installation procedure
- Analog and Digital Filter Design
- Hands-On Filter Design and Implementation
- Basics of Digital Image Processing
- Hands-On of Edge Detection filters on Images
- Basics of Audio signal Processing
- Hands-On of recording audio and filtering noise signal
- Bio-medical & Astro-physics Applications
- Demonstration of other applications

registration can be completed by filling the form available at <u>https://forms.gle/wqrydSaZ6b46nCGz5</u>

Join the whatsApp group by clicking the below link https://chat.whatsapp.com/ILC8QT7EPpX7f8R7f5BKSS Last date for registration is July 2nd, 2021. Certificates will be provided to registered participants upon completion of course.

Speakers are:
1. Dr. R Subha, Associate Professor.
2. Dr. Nayana B R, Associate Professor
3. Mrs. Sumalatha, Assistant Professor
4. Mrs. Rekha R, Assistant Professor

ORGANIZING CHAIR Dr V R Manjunath Principal, Sir MVIT

**CONVENOR Dr H L Suresh**, Prof &Head of Dept of EEE

#### COORDINATOR

**Dr. R Subha,** Ph : 9480614932 Assosicate Professor <u>subha\_eee@sirmvit.edu</u>

**Dr.Nayana B R,** Ph : 9480116483 Associate Professor <u>nayana eee@sirmvit.edu</u>

#### **CO-COORDINATORS**

Mrs. Anchal Chhabra, Ph: 9900444922 Assistant Professor <u>anchal eee@sirmvit.edu</u>

Mrs. Reshma T M, Ph: 9400299031 Assistant Professor reshma\_eee@sirmvit.edu

#### DEPT. OF ELECTRICAL & ELECTRONICS ENGG.



## Digital Signal Processing & Its Applications

Registration form

July 5th- 10th 2021 \* Required

1. Name \*

\_\_\_\_\_

2. USN \*

3. email-ID \*

4. Mobile Number \*

5. Branch \*

Mark only one oval.

**EC** 

CS

BT

TCE

EEE

◯ ME

⊂ cv

#### 6. Semester \*

Mark only one oval.

This content is neither created nor endorsed by Google.

Google Forms

Feedback F	Form
------------	------

\* Required

- 1. Email \*
- 2. Full Name (To be displayed in the certificate) \*
- 3. Organisation( To be displayed in the certificate) \*

Vote of Thanks

Vote of Thanks - Mrs Anchal Chhabra



http://youtube.com/watch?v=c4YpmkIA\_Z8

Feedback

4. The sessions gave an insight into the applications of Digital Signal Processing in different domains \*

Mark only one oval.

Strongly agree
Agree
Neutral

#### Feedback Form

5. The sessions demonstrated the design of filters and its applications for real life applications \*

Mark only one oval.

Strongly agree

Agree

🔵 Neutral

6. The Speakers were able to create interest in the topics \*

Mark only one oval.

Strongly Agree

Agree

Neutral

7. Which session contents did you find useful and interesting? \*

Check all that apply.

Basics of MATLAB & DSP

Filter Designing

Image Processing

Audio Processing

other Applications

8. The SDP inspired me to identify my area of interest \*

Mark only one oval.

Strongly agree

Agree

- 🔵 Neutral
- 9. What are the key take aways from this SDP? \*
- 10. Would you prefer the any future SDP like "ML using Python" etc. to be in \_\_\_\_\_ \*

Mark only one oval.

- 100% self paced mode
- 50% self paced and 50% online
- 100% online

11.	Any feedback/Suggestions	for Improvement
	,	

12. Overall Feedback \*

Mark only one oval.

Excellent

📃 Very Good

Good

Average

This content is neither created nor endorsed by Google.



Day 3 * Required	
Questionare	
Session 5	
Edge detection filters determines *	5 points
O Vertical edges	
O Horizontal edges	
O Curved edges	
All the above	
Image is a 2D data *	5 points
O True	
O False	
Back Submit	

Never submit passwords through Google Forms.

This content is neither created nor endorsed by Google. Report Abuse - Terms of Service - Privacy Policy







## SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY

## Approved by AICTE, New Delhi/ VTU, Belgavi/NAAC/NIRF Rank Band :250-300 Krishnadevaraya Nagar, Bangalore 562157 Department of Electrical and Electronics Engineering

## **Certificate of Participation**

This is to Certify that

Rishabh Aditya

from
Electrical and electronics

has participated in Five day online Short Term Training Program(STTP) on Digital Signal

Processing and its Applications (DSP&A-21) from 5th July -10th July 2021.



Bok Non surger

Coordinator Dr. R Subha

Coordinator Dr. Nayana B R

Head of the Department Dr. H. L. Suresh

PRINCIPAL Dr. V. R. Manjunath

Made for free with Certify'em



Krishnadevaraya Educational Trust Sir M. Visvesvaraya Institute of Technology, Bengaluru-562 157

## **Department of Electrical and Electronics Engineering**

AY: 2021-22

Sl. No	USN	STUDENT NAME	Enrolled for SDP/Course/ /Nptel Swayam etc	Date( from and to)
1	1MV18EE086	Sakshi.N		
2	1MV17EE085	Tanya Girish		
3	1MV18EE084	RONIT BISWAS		
4	1MV18EE067	Pooja K		
5	1MV18EE104	SUSHMITHA SV		
6	1MV19EE412	Vijay kumar a m		
7	1MV18EE115	YASHWANTH GOWDA RJ		
7	1MV19EE413	Vishwas C	One Week	
8	1MV18EE064	Pavan Kumar GK	Online Short	
9	1MV18EE098	SOUMYA GUPTA	Term Training	05 <sup>th</sup> 10 <sup>th</sup> July
10	1MV18EE116	Yogesh Raju N R	Program On	05 -10 July,
11	1MV18EE078	Rakshith BN	"Digital Signal	2021.
12	1MV19EE411	SUNDARRAJ S R	Digital Digital	
13	1MV16EE109	Tarun Kumar S	its applications?	
14	1MV18EE112	Vivek v	its applications	
14	1mv18ee107	Vikram saini		
15	1MV18EE075	Rahul k		
16	1MV18EE066	Piyush kumar		
17	1MV18EE071	PRUTHVIRAJ S G		
18	1MV18EE060	Nidhi R		
19	1MV18EE013	Anagha R		
20	1MV18EE022	Arjun Kashyap GS		
1	<b>_</b>			

Anchel

(Mrs.Anchal Chapra) Coordinator- STP

PROP. & HEAD OEPT. OF ELECTRICAL ENGRA VISVESVARATA INSTITUTE OF COMMA Hadovarayanagar, Hunasa Inviat Velahanka, Bangalore-Sector



## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi | Approved by AICTE| Accredited by NAAC UGC)

Off International Airport Road, Bengaluru – 562 157

## Department of Electrical and Electronics Engineering CERTIFICATE OF PARTICIPATION

This is to certify that Ms. ANAGHA R (USN: 1MV 18EE 013) of EEE department of Sir MVIT has participated in the

One Week Online Short Term Training Program On

## "Digital Signal Processing and Its Applications"

organized by the Department of Electrical and Electronics Engineering of Sir M. Visvesvaraya Institute of Technology, Bangalore from 05<sup>th</sup> -10<sup>th</sup> July, 2021.



Mrs. Anchal chapra (Asst. Professor) Dept. of EEE, Sir M.VIT



Dr. SURESH H L Prof& Head/Dept. of EEE Dept. of EEE, Sir M.VIT



Dr. V.R.MANJUNATH Principal Sir M.VIT



SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY (Affiliated to VTU, Belagavi | Approved by AICTE| Accredited by NAAC UGC) Off International Airport Road, Bengaluru, Karnataka - 562157 Department of Electrical and Electronics Engineering

## A Report On

One Week Online Short Term Training Program On "Digital Signal Processing and Its Applications"

## 05.07.2021- 10.07.2021

## FINAL REPORT ABOUT THE PROGRAMME

The department of Electrical and Electronics Engineering of Sir M.VIT was organized a One Week Online Short Term Training Program On "Digital Signal Processing and Its Applications" during 05.07.2021 to 10.07.2021.20 participants were registered for the workshop from EEE department. The Programme was inaugurated by Dr H L Suresh , HOD of EEE Dept of Sir MVIT. He had explained about the recent trends in the aviation sector and the usefulness of DSP systems in defense research. Also he have insisted for the inclusion of real time testing Mechanisms in the curriculum for the easier understanding of the course. There were totally five sessions were arranged on these two days excluding the Inaugural part. Speakers were selected such that they are having enough knowledge and presentation skills in the domain considered.

Contemporary Digital Signal Processors (DSPs) have large resources of logic gates and RAM blocks to implement complex digital computations. As DSP designs employ very fast I/Os and bidirectional data buses it becomes a challenge to verify correct timing of valid data within setup time and hold time. Floor planning enables resources allocation within FPGAs to meet these time constraints. DSPs can be used to implement any logical function that an ASIC could perform. The ability to update the functionality after shipping, partial re-configuration of a portion of the design and the low non-recurring engineering costs relative to an ASIC design (notwithstanding the generally higher unit cost), offer advantages for many applications.

Separate sessions were assigned for discussions and analysis. Where ever possible real time demo was arranged. Last session demo about the DSP module for motor speed control for industrial applications gives the students a real time exposure about the DSP systems.

Also Dr Nayana had given a presentation about the R&D activities happening in IISc and she had insisted for the collaboration of the various colleges to work on FPGA systems. Also she had invited the interested students to join with IISc working team to learn and practice with the DSP design tools. Since major portion of the participants are from entry level to their career, the presentations were very fundamental and at the same time higher quality was maintained. The students were really enthuastic and willing to learn taken the opportunity to meet the demands of the industry. The following schedule was implemented for the entire Programme.

Date	Session	Time	Session Title	Resource Person
	1	Self paced	Introduction to Digital Signal	Dr. Nayana B R
05-07-2021	1	Sen paced	Processing and DSP Toolbox	Dr. R. Subha
	2	2:45 to 3:45 PM	Lab session on Basics of	Dr. R. Subha
			MATLAB and DSP Toolbox.	
	3	Self paced	Analog and Digital Filter Design	
06-07-2021	4	2:45 to 2:45 DM	Hands-On - Filter Design and	Dr. R. Subha
	4	2:45 to 5:45 PM	Implementation	
07 07 2021	5	Self paced	Basics of Image Processing	Mrs. P. Sumalatha
07-07-2021	6	2:45 to 3:45 PM	Hands-On : Image Processing	
	7	Self paced	Basics of Audio signal	Mrs. Rekha
08-07-2021	,	Sen paece	Processing	Radhakrishnan
	8	2:45 to 3:45 PM	Hands-On : Audio Processing	
	0	Salf paced	Bio-medical & Astrophysics	
09-07-2021		Sen paeed	Applications	Dr. Navana B.R.
07-07-2021	10	2:45 to 3:45 PM	Demonstration of other	Dr. Huyunu Dr.
	10	2.45 to 5.45 PM	applications	

All the presentation materials were given to the participants in the form of CD. Feedback being collected from the participants and they have shared their views and expectations during the valedictory ceremony. As the continuous process of this workshop it was decided to conduct one national conference on DSP systems in the month of April, 2017.Also the final year EEE students who are having no idea about the DSP, till then were motivated to do the project on the various problems which can be solved by DSP design. In this manner the core objective of the Programme was achieved to certain extend.

## **EVENT PHOTOS**

~~~~~~~~~~~~~~~~~~~~~~~~









## SIR M.VISVESVARAYA INSTITUTE OF TECHNOLOGY Bengaluru-562157

## **Department of Electrical and Electronics Engineering**

## **INDEX SHEET FOR CRITERIA 1.2.1**

| Sl. | Name of SDP/Add on Program                                                           | Date                                             | Number of students enrolled for |
|-----|--------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------|
| No. | /Nptel/Swayam                                                                        | (From-to)                                        | the Course                      |
| 1   | One Week Online Short Term Training<br>Program On "Machine learning using<br>Python" | 19 <sup>th</sup> -24 <sup>th</sup> July,<br>2021 | 20                              |

v.m. par.f. CRITERIA COORDINATOR

HOD

PROF. & READ OEPT. OF ELECTRICAL ENGN VISVESVARATA INSTITUTE OF COMMA Hadovarayanagar, Hunasa Instat Valahanka, Bangalore-Succes

### FROM

Mrs. Anchal Chapra,

Asst. professor, Dept. of EEE,

Sir M.VIT, Bengaluru.

### TO

The Principal,

Sir M.VIT, Bengaluru.

### Through

The HOD, Dept. of EEE,

Sir M.VIT, Bengaluru.

Respected Sir,

## Sub: Seeking permission for organizing one week Students training program-Reg

The Dept. of EEE of Sir MVIT, would like to organize a One week short term training program through online mode from 19.07.2021 Monday to 24.07.2021 Saturday. The topic will be "Machine Learning using Python" which will be covering all the fundamentals of Python language and its solutions in Power system Engineering.

We humbly request you sir to permit for the same and do the needful.

Thanking you.

Yours Sincerely,

Anchel

(Mrs. Anchal Chapra)

Approved by

Auffrit. ye

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishoodevoravanogar, Hunasomaronahalli, International Augurt Road, BANGALORE-562 157

Forwarded for kind approval

Bring.

PHOP. & HEAD OEPT. OF ELECTRICAL ENGA VISVESYARAYA INSTITUTE OF ( adovarayanagar, Hunasa Visi Velahanka, Bangalora-Sada

### Sir M Visvesvaraya Institute of Technology

Krishnadevarayanagar, Bangalore-562157, Karnataka Affiliated to VTU, Belagavi | Approved by AICTE | Accredited by NAAC UGC



**Department of Electrical and Electronics Engineering** 

#### In association with



Organizes

One Week Hands-on Online Student Development Program on

### MACHINE LEARNING USING PYTHON

19th TO 24th July 2021

#### **RESOURCE PERSONS**

Dr. R. Subha, Associate Professor. Dr. Nayana B. R., Associate Professor Mrs. P. Sumalatha, Assistant Professor Mrs. Rekha R, Assistant Professor

#### **ORGANIZING CHAIR**

Dr. V. R. Manjunath Principal, Sir MVIT

#### CONVENOR

Dr. H. L. Suresh Professor & HOD EEE

| 1 1 1 1 1 1 1 |                     | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                  |
|---------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Date          | Session             | Time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Session Title                    |
|               | 1                   | Self paced                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Introduction to Machine Learning |
| 19-07-2021    | 2                   | 3.00 to 4.00 PM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Lab session on Importing and     |
|               |                     | 5.00 10 4.00 1 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Preprocessing Data               |
| 20.07.2021    | 3                   | Self paced                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Data Analysis and Visualization  |
| 20-07-2021    | 4                   | Image: Self pacedSession TitleSelf pacedIntroduction to Machine Learnin3:00 to 4:00 PMLab session on Importing and<br>Preprocessing DataSelf pacedData Analysis and Visualization3:00 to 4:00 PMLab SessionSelf pacedLinear and Logistic Regression3:00 to 4:00 PMLab SessionSelf pacedLinear and Logistic Regression3:00 to 4:00 PMLab SessionSelf pacedFeature Extraction and<br>Classification3:00 to 4:00 PMLab SessionSelf pacedFeature Selection And Decision<br>Tree3:00 to 4:00 PMLab Session | Lab Session                      |
| 22 07 2021    | 5                   | Self paced                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Linear and Logistic Regression   |
| 22-07-2021    | 6                   | 23:00 to 4:00 PMLab session on importing a<br>Preprocessing Data3Self pacedData Analysis and Visualiza43:00 to 4:00 PMLab Session5Self pacedLinear and Logistic Regress63:00 to 4:00 PMLab Session7Self pacedFeature Extraction and<br>Classification83:00 to 4:00 PMLab Session                                                                                                                                                                                                                      | Lab Session                      |
|               | 7-2021 7 Self paced | Solf paced                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Feature Extraction and           |
| 23-07-2021    |                     | Classification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  |
| all a ready   | 8                   | 3:00 to 4:00 PM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Lab Session                      |
|               | 0                   | Solf paced                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Feature Selection And Decision   |
| 24-07-2021    | 9                   | Sen paceu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Tree                             |
|               | 10                  | 3:00 to 4:00 PM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Lab Session                      |

#### COORDINATORS

Mrs. Anchal Chhabra, Assistant Prof., anchal\_eee@sirmvit.edu, Ph: 9900444922 Mrs. Reshma T. M., Assistant Prof., reshma\_eee@sirmvit.edu, Ph: 9400299031

#### **Link for Registration**

https://forms.gle/LxjmoVWBgGcyQVG6A

#### Link for joining WhatsApp Group

https://chat.whatsapp.com/ILC8QT7EPpX7f8R7f5BKSS

Last date for registration is 17<sup>th</sup> July, 2021. Certificates will be provided on successful completion

#### SCHEDULE

## **DETAILED SCHEDULE OF SDP**

| Date       | Sessio<br>n | Time               | Session Title                                      | <b>Resource Person</b> |
|------------|-------------|--------------------|----------------------------------------------------|------------------------|
| 19-07-2021 | 1           | Self paced         | Introduction to Machine<br>Learning                | Mrs. P. Sumalatha      |
|            | 2           | 3:00 to 4:00<br>PM | Lab session on Importing and<br>Preprocessing Data | Dr. R. Subha           |
| 20-07-2021 | 3           | Self paced         | Data Analysis and Visualization                    | Mrs. Rekha R           |
| 20 07 2021 | 4           | 3:00 to 4:00<br>PM | Lab Session                                        |                        |
| 22-07-2021 | 5           | Self paced         | Linear and Logistic<br>Regression                  | Mrs. P. Sumalatha      |
|            | 6           | 3:00 to 4:00<br>PM | Lab Session                                        |                        |
| 23-07-2021 | 7           | Self paced         | Feature Extraction and Classification              | Dr. Navana B R         |
| 25-07-2021 | 8           | 3:00 to 4:00<br>PM | Lab Session                                        |                        |
| 24.07.2021 | 9           | Self paced         | FeatureSelectionAndDecision Tree                   | Dr. R. Subha           |
|            | 10          | 3:00 to 4:00<br>PM | Lab Session                                        |                        |

The detailed schedule of the sessions is as follows



## Sri Krishnadevaraya Educational Trust Sir M. Visvesvaraya Institute of Technology, Bengaluru-562 157

## **Department of Electrical and Electronics Engineering**

AY: 2021-22

| Sl. No | USN        | STUDENT NAME          | Enrolled for<br>SDP/Course/<br>/Nptel Swayam<br>etc | Date( from and to)                             |
|--------|------------|-----------------------|-----------------------------------------------------|------------------------------------------------|
| 1      | 1MV19EE054 | MEGHANA V             |                                                     |                                                |
| 2      | 1MV18EE020 | ANNAPURNA C S         |                                                     |                                                |
| 3      | 1MV18EE021 | ANUPAM MISHRA         |                                                     |                                                |
| 4      | 1MV17EE096 | WALUSHA AWNOORY       |                                                     |                                                |
| 5      | 1MV19EE053 | MANYA JHA             |                                                     |                                                |
| 6      | 1MV20EE042 | MAYANK MANU           | One Week Online                                     |                                                |
| 7      | 1MV19EE055 | MOHAMMED ARHAAN PASHA | Short Torm                                          |                                                |
| 8      | 1MV19EE056 | MOHD JUNAID           | Short Term                                          |                                                |
| 9      | 1MV20EE045 | MOHMAD HUZEF TATARIA  | Training Program                                    |                                                |
| 10     | 1MV19EE058 | MRUGANK PANDYA        | On                                                  | 19 <sup>th</sup> -24 <sup>th</sup> July, 2021. |
| 11     | 1MV17EE095 | VIVEK SINGH           |                                                     |                                                |
| 12     | 1MV18EE407 | HEMANTH BABU V        | "Machine                                            |                                                |
| 13     | 1MV18EE408 | KISHORE K S           | learning using                                      |                                                |
| 14     | 1MV17EE097 | YATHISH H P           | Python"                                             |                                                |
| 15     | 1MV20EE044 | MOHITH N              | i yuloli                                            |                                                |
| 16     | 1MV19EE059 | MUNNA BHARDWAJ        |                                                     |                                                |
| 17     | 1MV20EE046 | MONIKA M R            |                                                     |                                                |
| 18     | 1MV20EE047 | NAGARJUNA M D         |                                                     |                                                |
| 19     | 1MV19EE057 | MOHHAMAD AFSER        |                                                     |                                                |
| 20     | 1MV20EE043 | MD NAWAZ SHARIF KHAN  |                                                     |                                                |
|        | N          |                       | 0                                                   | 1                                              |

miner

(Mrs.Anchal Chapra)

Coordinator- STP

On p.

PHOP. & READ OEPT. OF ELECTRICAL ENGO VISVESVARATA INSTITUTE OF Communication adovarayonagar, Hunasa Visit Velahanka, Bangalore-terr





## SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY

## Approved by AICTE, New Delhi/ VTU, Belgavi/NAAC/NIRF Rank Band :250-300 Krishnadevaraya Nagar, Bangalore 562157 Department of Electrical and Electronics Engineering

## **Certificate of Participation**

This is to Certify that

Harshitha S Reddy

from Sir M Visvesvaraya Institute of Technology

has participated in One Week Hands-on Online Student Development Program on Machine Learning using Python from 19<sup>th</sup> to 24<sup>th</sup> July 2021



**Coordinator** Reshma T M

**Coordinator** Anchal Chhabra

Head of the Department Dr. H. L. Suresh

PRINCIPAL Dr. V. R. Manjunath

Made for free with Certify'em

DEPARTMENT OF Electrical and Electronics ENGINEERING,

Sir M. Visvesvaraya Institute of Technology

## A REPORT on WORKSHOP on "MACHINE LEARNING USING PYTHON" 19<sup>th</sup> -24<sup>th</sup> July, 2021

## **Objectives of Workshop**

- 1. To introduce and acquaint students to design and development of Intelligent controllers using machine learning applications..
- 2. To prevail on them the importance of Data analysis and scope of intelligent controllers in the control system domain.
- 3. Practical exposure to FPGA systems and novel design controllers.
- 4. Emphasize Industrial relevance of IOT.
- 5. To inspire and motivate students to understand and explore the world of Data Analysis using IOT.

## Nature of the program:

Present Program is a workshop on "Machine learning using Python" The aim is to introduce students to the world of Python programming. Updating students as per industry/global requirements and improving student's skills through hands-on sessions.

## **Duration of Program:**

The workshop was conducted for one week through online mode during  $19^{th}$  and  $24^{th}$  of July, 2021 between 9 am to 5 pm .

## **Participants:**

The participation was open for all the department students

**Guests:** 

The workshop made use of two external resource persons :

1. Mr. Venugopal, Director, NTTF India, Bangalore.

2. Dr. Suresh Thulasidas Professor, Center of Electronic system design, IISc.

## Methodology:

The entire session was carried out with partial hands-on along with power point presentation (including the software installations). Question and answer session was also entertained throughout the program.

### **About the Workshop**

In this new era of Control system engineering, we come across new Technologies, tools and frameworks to make our computing life simple, since Electrical Engineering is a Dynamic niche; our Knowledge needs to be updated with most recent technologies. Student's part of engineering stream should be made aware of new technologies trending in the market of FPGA. As faculties it's our responsibility to introduce students to different platforms and concepts, their by letting them to choose their stream / area of choice. Intelligent controller is one such trending area in today's date and control engineers are in high demand. With this workshops introduction we are trying to deliver the need of the market and also students can incorporate this understanding in their respective mini/main projects, and make one self more eligible for job placements.

Intelligent control system (ICS) is the science of examining control system with the purpose of drawing conclusions about that information. ICS is used in many industries to allow companies and organization to make better business decisions or disprove existing models or theories. ICS is a process used to inspect, clean, transform and remodel data with a view to reach to a certain conclusion for a given situation. ICS is typically of two kinds: linear or non linear. The type of data dictates the method of analysis. In qualitative research, any non-numerical data like text or individual words are analyzed. The proposed Two days workshop on "Recent Trends in Intelligent Controllers and Industrial Automation" organized by the Department of Electrical and Electronics Engineering of NMIT will be teaching the students from various Engineering domains about the benefits and challenges encountered in the evaluation of software based hardware applications in the present scenario.

For example, IoTs (Internet of Things) are the upcoming technology by using which prebuilt logic blocks and programmable routing resources; one can configure these chips to implement custom hardware functionality without ever having to pick up a breadboard or soldering iron. Developing the digital computing tasks in software and compile them down to a configuration file that contains information on how the components should be wired together. In addition, IoTs are completely reconfigurable and instantly take on a brand new "personality" during recompilation in a different configuration of circuitry. Traditionally, IoTs s have been reserved for specific <u>vertical applications</u> where the volume of production is small. For these low-volume applications, the premium that companies pay in hardware costs per unit for a programmable chip is more affordable than the development resources spent on creating an ASIC for a low-volume application. Today, new cost and performance dynamics have broadened the range of viable applications.

In the past, IoT technology could be used only by engineers with a deep understanding of digital hardware design. The rise of high-level design tools, however, is changing the rules of FPGA IoT programming, with new technologies that convert graphical block diagrams or even C code into digital hardware circuitry. This aspect is motivating the students to work on IoTs design and develop new user friendly hardware.

This one week workshop dealing with the fundamentals and the recent trends in the IoTs design that will be useful for the students to do their project works using IoTs.

### **Outcomes of the workshop:**

1. Students grasped the importance of IOT and easy to use concepts of MATLAB programming.

2. Students are well versed in writing basic MATLAB program using fundamental concepts.

3. Faculty and Students are able to explore all new advanced modules and features of FPGA.

4. Faculty are able to give different problem statements based on IOT modules, their by coming up with all new ideas and solutions.



An Interactive session by Dr. Venugopal



#### SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY

#### **Department of Biotechnology**

- 1. EVENT TITLE: 10 Day Lecture Series on Drug Discovery
- 2. START DATE: 5th April 2021
- 3. END DATE: 7<sup>th</sup> May 2021



#### 4. Description

The 10 Day Lecture series was initiated on 5<sup>th</sup>April 2021 via virtual mode. The Series was given a bright start by Dr Manjunath Ramarao, Group Director and Head, Discovery Biology and Translational Sciences Bristol-Myers Squibb, Bangalore. All the topics related to Pharmacology and drug discovery pipeline was discussed during the lecture series.

Participants: 42

## **10**-WEEK LECTURE SERIES ON DRUG DISCOVERY

## April 05 - May 07, 2021

Organized by

Department of Biotechnology,

Sir M. Visvesvaraya Institute of Technology, Bangalore- 562 157 6

Supported by

BIOCON-BRISTOL MYERS SQUIBB, Bengaluru, Karnataka- 560 099 Sponsored by: Sri Krishnadevaraya Educational Trust Bangalore-560 080

## 10 Week Lecture Series On Drug Discovery- 2021

| Date                   | Speaker                                        | Topics Covered                                                                    |
|------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|
| Monday, April 5, 2021  | Dr. Manjunath Ramarao                          | New Modalities In Drug Discovery                                                  |
| Tuesday, April 6, 2021 | Dr. Kaushik Ghosh                              | Protein Sciences, Structure, Biophysics                                           |
| Friday, April 09, 2021 | Dr. Prakash Subramanyam                        | Cellular Biology                                                                  |
| Monday, April 12, 2021 | Dr. Yazh Muthukumar                            | Molecular Biology                                                                 |
| Friday, April 16, 2021 | Dr. Amit Anand                                 | Genomics                                                                          |
| Monday, April 19, 2021 | Dr .Namrata Jayanth                            | In Vitro Pharmacology, Technology                                                 |
| Friday, April 23, 2021 | Dr Jyoti Gulia                                 | Cardiovascular Diseases                                                           |
| Monday, April 26, 2021 | Dr. Shailesh Dudhgaonkar                       | Immunology And Oncology                                                           |
| Friday, April 30, 2021 | Dr.Prakash Vachaspati &<br>Dr.Thanga Mariappan | Pharmacology                                                                      |
| Monday, May 03, 2021   | Dr. Debarati Mazumder                          | Fibrosis                                                                          |
| Friday, May 07, 2021   | DrAnagha Jadhav And Gaurav Jain                | Seminar 1: Translational Sciences<br>Seminar 2: Bioinformatics and Data Analytics |

## TARGET AUDIENCE

Interested students studying in VIII semester BE Biotechnology are eligible to register for the workshop.

2A

A Maximum of **80 Students** will be permitted on first come first serve basis.

## All talks will be between 10:am and 12 noon

## **REGISTRATION DETAILS:**

- Registration can be done via the link given below.
- **Last Date for Registration:** 4<sup>th</sup> April 2021.
- All Registrants will get e-certificates at the end of the lecture series.

Registration Form link: https://forms.gle/2Au6TcYSoVjXk6Rc7

## Webinar Link : meet.google.com/ddf-xdej-rsk

Dr.H G Nagendra , Prof &Head, Dept. of Biotechnology Dr.Priya Narayan, Associate professor, Dept. of Biotechnology Dr. Jagadeesh Kumar D, Assistant Professor, Dept. of Biotechnology For More details contact coordinators :

**COORDINATORS:** 

Email: priya\_biotech@sirmvit.eduContact no : 9880993818Email: jagadish\_biotech@sirmvit.eduContact no : 9845567973

## **DEPARTMENT OF BIO-TECHNOLOGY**

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY BANGALORE 562 157

## **CORDIALLY INVITES ONE & ALL**

FOR THE INAUGURAL TALK ON "NEW MODALITUES IN DRUG DISCOVERY"

**OF THE** 

10 WEEK LECTURE SERIES ON DRUG DISCOVERY (APRIL 5<sup>TH</sup> TO MAY 7<sup>th</sup>, 2021)

By

## Dr. Manjunath Ramarao

Group Director and Head, Discovery Biology and Translational Sciences Bristol-Myers Squibb, Bangalore

## **INDUSTRY PARTNER**

THE BIOCON BRISTOL-MYERS SQUIBB RESEARCH & DEVELOPMENT CENTER (BBRC) BANGALORE- 560099

| TIME | : 10:00 AM                           |  |
|------|--------------------------------------|--|
| DATE | : Monday, 5 <sup>th</sup> APRIL 2021 |  |
|      | : Webinar link:                      |  |
|      | meet.google.com/ddf-xdej-rsk         |  |

PATRONS: SRI KET, BANGALORE – 560 080

## HEARTY WELCOME TO ALL DELEGATES AND INVITEES

## "THE 3<sup>rd</sup> "10-WEEK LECTURE SERIES ON DRUG DISCOVERY"

(April 05 – May 07, 2021)

Venue: Dept. of Biotechnology, Sir. MVIT

## **Jointly Organized By**

Department of Biotechnology

Sir M Visvesvaraya Institute of Technology Krishnadeveraya Nagar, New International Airport Road, Hunasamaranahalli, Bangalore-562157



Syngene

THE BIOCON BRISTOL-MYERS SQUIBB RESEARCH & DEVELOPMENT CENTER (BBRC) BANGALORE- 560099

&

## INAUGURAL TALK ON "NEW MODALITUES IN DRUG DISCOVERY" By : Dr. Manjunath Ramarao

Group Director and Head, Discovery Biology and Translational Sciences Bristol-Myers Squibb, Bangalore-560099













Sponsored By Sri Krishnadevaraya Educational Trust, Bangalore-562157

#### People **Molecular Technologies in Drug** ≪° Share invite **Discovery** Currently in this meeting (47) Shreyaas .R. Yadav (Guest) S Kaushik Ghosh Shweta Ramamoorthy SR Deputy Research Director and Head Sindu C (Guest) SC Protein Science & Molecular Technologies (PSMT) Q Snehal Ponnappa.K (Guest) SP Srinidhi Athreyas (Guest) Q SA BBR Srividya Subash (Guest) Q SS Q VS Vaishnavi S (Guest) Vrushabh C (Guest) VC Yamuna (Guest) Y On hold Kaushik Ghosh Yashaswini H C (Guest) YC MP PR G JZ SS AR MJ YC KG KC DN YM Yashaswini MA (Guest)









### DEPARTMENT OF BIOTECHNOLOGY SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY

Instructions: Answer All Questions; Each question carries ONE mark

|          | Name: USN Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | _ |   |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| Sl<br>No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | А | М |
| 1.       | Which of the following is not a cell adhesion protein?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |
|          | A) Cauterin B) Integrin C) Selectin D) Clatifin<br>Two strains of mice which are genetically identical except for a single genetic locus are referred to as                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |
| 2.       | A) Syngenic B) Allogenic C) Congenic D) Heterogenic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |   |
| 3.       | <ul> <li>During cell growth of a bacterium</li> <li>A) New peptidoglycan is required along with hydrolysis of bonds linking the peptidoglycan chains</li> <li>B) New peptidoglycan is required but no hydrolysis of old peptidoglycan occurs</li> <li>C) Old peptidoglycan is degraded and replaced with newly synthesized longer polymer</li> <li>D) Newly synthesized peptidoglycan is utilized to deposit a new layer of the peptidoglycan in the cell wall.</li> </ul>                                                                                              |   |   |
| 4.       | A researcher samples n individuals randomly from a population of black buck and identifies their sex.<br>The number of females in the samples follows<br>A)Exponential distribution B) Binomial distribution C) Poisson distribution D) Normal distribution                                                                                                                                                                                                                                                                                                             |   |   |
|          | Amino acid residue which is most likely to be found in the interior of water-soluble globular                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |
| 5.       | proteins is<br>(A) Threonine (B) Aspartic acid (C) Valine (D) Histidine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |
| 6.       | The active site in the alpha/beta barrel structures is usually located<br>(A) inside the barrel (B) at the amino side of the strands (C) at the carboxy side of the strands (D) at<br>any arbitrary site                                                                                                                                                                                                                                                                                                                                                                |   |   |
| 7.       | Which one of the following is NOT an algorithm for building phylogenetic trees?<br>(A) Maximum parsimony (B) Neighbor joining (C) Maximum likelihood (D) Bootstrap                                                                                                                                                                                                                                                                                                                                                                                                      |   |   |
| 8.       | <ul> <li>Which of the following statements is true for two different tripeptides consisting of either glycine or proline?</li> <li>(A) Glycine tripeptide will have relatively larger allowed area on the Ramachandran plot.</li> <li>(B) Proline tripeptide will have relatively larger allowed area on the Ramachandran plot.</li> <li>(C) Both the tripeptides will fall primarily in the disallowed regions of the Ramachandran plot.</li> <li>(D) Both the tripeptides will fall primarily in the overlapping allowed regions of the Ramachandran plot.</li> </ul> |   |   |
| 9.       | Which one of the following is the major product of fatty acid synthase?<br>(A) Acetyl-CoA (B) Palmitoyl-CoA (C) Acetoacetate (D) Palmitate                                                                                                                                                                                                                                                                                                                                                                                                                              |   |   |
| 10.      | <ul> <li>Arabidopsis is advantageous for plant genetic research because:</li> <li>(A) it is commercially important as a food crop (B)it is having longer life cycle (C)it is a small plant with a small genome size which can be raised inexpensively (D)it is a close relative of corn and results with this species can be applied to problems in corn</li> </ul>                                                                                                                                                                                                     |   |   |
| 11.      | Molecular Dynamics simulation is carried out for:<br>(A) Obtaining ensemble of structures at physiological condition (B)Obtaining the structure at global<br>energy minimum (C)Fitting prospective drug candidate molecules to a receptor (D)Modeling a<br>protein structure from sequence alone                                                                                                                                                                                                                                                                        |   |   |
| 12.      | A left handed alpha helix falls in the Ramachandran plot under:<br>(A) allowed region (B) partially allowed region (C) disallowed region (D) line joining allowed and<br>partially allowed region                                                                                                                                                                                                                                                                                                                                                                       |   |   |
| 13.      | The Greek key motif is composed of:<br>(A)Four alpha helices (B)Three alpha helices and one beta strand (C) Two alpha helices and two beta<br>strands (D)Four beta strands                                                                                                                                                                                                                                                                                                                                                                                              |   |   |
| 14.      | In human genome, approximatelyof the DNA codes for proteins:<br>(A) 10%(B) 2% (C) 50%(D) 20%                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |
| 15.      | In competitive inhibition<br>(A)Km increases, V max constant (B) Km decreases, V max constant (C)Km constant, V max increases<br>(D) Km decreases, V max increases                                                                                                                                                                                                                                                                                                                                                                                                      |   |   |

|     | For a reaction to be enorthingous                                                                         |  |
|-----|-----------------------------------------------------------------------------------------------------------|--|
| 16. | For a reaction to be spontaneous,<br>(A) AC is nogative (B) AC is positive (C) AC = 0. (D) AH increases   |  |
|     | $(D) \Delta O is positive (C) \Delta O = O (D) \Delta II increases$                                       |  |
| 17  | The dependence of molecular weight of protein molecule to the distance traveled in denaturing gel         |  |
| 17. | electrophoresis is:                                                                                       |  |
|     | (A) Intear (B) cubic (C) logarithmic (D) inversely related to the amount of denaturant                    |  |
| 10  | Product yield coefficient is defined as                                                                   |  |
| 18. | (A) Cell mass formed: substrate utilized (B) Substrate utilized: cell mass formed (C) Product formed:     |  |
|     | substrate utilized (D) Substrate utilized : product formed                                                |  |
| 10  | At equilibrium the receptor occupancy is related to drug concentration by                                 |  |
| 19. | (A) Henderson-Haselbach equation (B) Hill-Langmuir equation (C) Lineweaver-Burk equation                  |  |
|     | (D)Langmuir adsorption isotherm                                                                           |  |
|     | In reconstruction of phylogenetic trees using molecular sequence data, a singleton site in MSA is         |  |
| 20. | considered to be                                                                                          |  |
|     | (A) an invariant site (B)an informative variable site (C)an uninformative variable site (D)a conserved    |  |
|     |                                                                                                           |  |
| 21. | (A) Leash (D) Clebel (C) Deinguide (D) Multiple                                                           |  |
|     | (A) Local (B) Global (C) Pair-wise (D) Multiple                                                           |  |
| 22. | The technique for identifying the nucleic acid sequences bound by a DNA/RNA binding protein is            |  |
|     | (A) Finger printing (B) Foot printing (C) Array printing (D) AFLP                                         |  |
| 20  | A restriction endonuclease recognizes a 8 bp unbiased conserved sequence as its cleavage site. How        |  |
| 23. | many probable site(s) can be present in a 70 kb DNA fragment ?                                            |  |
|     | (A) Z (B) I (C) 4 (D) 6                                                                                   |  |
| 24. | A linear fragment of DNA will be unstable if it carries:                                                  |  |
|     | (A) I wo origins of replication (B) I wo centromeres (C) I wo telomeres (D) I wo selection markers        |  |
| 25  | Which of the following amino acids has the highest probability to be found on the surface of a typical    |  |
| 25. | globular protein in aqueous environment?                                                                  |  |
|     | A) Ala B) val C) Arg D) lie                                                                               |  |
|     | The statistical frequency of the occurrence of a particular restriction enzyme cleavage site              |  |
| 26. | that is 6 bases long can be estimated to be                                                               |  |
|     | (A) once every 24 bases (B) once every 256 bases (C) once every 1024 bases (D) once every 4096            |  |
| -   | Dases                                                                                                     |  |
| 27  | Telomerase, which completes the replication of Telomeres is a specialized                                 |  |
| 27. | (A) RNA Dependent DNA polymerase (B) DNA Dependent RNA polymerase (C) DNA Dependent DNA                   |  |
|     | polymerase (D) RNA Dependent RNA polymerase                                                               |  |
| 28. | Regulation of Trp Uperon by binding of Tryptophan to trp repressor is termed as                           |  |
|     | (A) Repression (B) induction (C) Anti termination (D) Attenuation                                         |  |
| 29. | Which of the following antibiotics inhibit 80S ribosomes                                                  |  |
|     | (A) Tetracycline (B) Streptomycin (C) Cyclonexamide (D)Chloramphenicol                                    |  |
|     | Tertiary structure of a protein consisting of $\alpha$ -helices and $\beta$ -strands can be determined by |  |
| 30. | (A) Circular Dichroism spectroscopy (B) Mass spectroscopy (C) NMR spectroscopy (D) UV                     |  |
|     | spectroscopy                                                                                              |  |

## SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY DEPARTMENT OF BIOTECHNOLOGY 10 DAY LECTURE SERIES ON DRUG DISCOVERY

#### MARKS OBTAINED

|    | USN        | NAME              | MARKS (50) |
|----|------------|-------------------|------------|
| 1  | 1MV16BT009 | DHRUV BALAYA      | 15         |
| 2  | 1MV16BT034 | SNEHAL PONNAPPA K | 20         |
| 3  | 1MV17BT002 | AISHWARYA D A     | 29         |
| 4  | 1MV17BT004 | ALLAN DSILVA      | 26         |
| 5  | 1MV17BT005 | ANAGHA G KULKARNI | 17         |
| 6  | 1MV17BT007 | APARNA SRINATH    | 21         |
| 7  | 1MV17BT008 | BHAVANA N V       | 19         |
| 8  | 1MV17BT011 | JAHNAVI M ZALKI   | 18         |
| 9  | 1MV17BT012 | MANOHAR J         | 09         |
| 10 | 1MV17BT013 | MEGHA S PATIL     | 21         |
| 11 | 1MV17BT016 | NIHARIKA S        | 14         |
| 12 | 1MV17BT017 | NIKHIL K          | 17         |
| 13 | 1MV17BT018 | PRATHEESHA        | 19         |
| 14 | 1MV17BT019 | PRIYANKA M R      | 20         |
| 15 | 1MV17BT020 | RAKSHITHA HR      | 15         |
| 16 | 1MV17BT021 | RANGON DUTTA      | 18         |
| 17 | 1MV17BT023 | SAHANA B T        | 12         |
| 18 | 1MV17BT024 | SAHANA S          | 13         |
| 19 | 1MV17BT027 | SHIVAM PANDIT     | 20         |
| 20 | 1MV17BT028 | SHREYA RAJASEKAR  | 29         |
| 21 | 1MV17BT029 | SHREYA SUMAN      | 15         |
| 22 | 1MV17BT034 | SRIVIDYA SUBASH   | 15         |
| 23 | 1MV17BT035 | SUPRITHA ML       | 18         |
| 24 | 1MV17BT038 | VISMAYA M K       | 19         |
| 25 | 1MV17BT039 | VRUSHABH C        | 27         |

## SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY 10 DAY LECTURE SERIES ON DRUG DISCOVERY FEEDBACK FORM

| SI<br>No | College/Institution/Affiliation               | Did the lecture<br>series help you<br>understand aspects<br>of drug discovery | Did the lecture<br>series help<br>understand<br>design of drugs<br>and trouble<br>shooting in the<br>Pharma Industry | Did the<br>lecture<br>series help<br>you<br>understand<br>newer<br>technologies<br>in drug<br>discovery | Did the<br>lecture<br>series<br>help you<br>think<br>towards<br>health<br>and well<br>being of<br>society | Did the<br>lecture<br>series<br>help<br>analyze<br>complex<br>problems<br>related to<br>drug<br>discovery? | Did the<br>session<br>give you<br>an<br>exposure<br>to newer<br>career<br>trends in<br>the<br>Pharma<br>Industry | Would<br>you like<br>to be<br>part of<br>many<br>more<br>such<br>lecture<br>series | Any other<br>comments/scope<br>for improvement                                                                                                                                                                                                |
|----------|-----------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1        | Sir MVIT                                      | 4                                                                             | 4                                                                                                                    | 5                                                                                                       | 4                                                                                                         | 5                                                                                                          | 4                                                                                                                | Maybe                                                                              | -                                                                                                                                                                                                                                             |
| 2        | Sir M Visvesvaraya<br>Institute of Technology | 5                                                                             | 5                                                                                                                    | 5                                                                                                       | 5                                                                                                         | 5                                                                                                          | 5                                                                                                                | Yes                                                                                | None                                                                                                                                                                                                                                          |
| 3        | Sir M Visveswaraya<br>Institute of Technology | 5                                                                             | 5                                                                                                                    | 5                                                                                                       | 5                                                                                                         | 5                                                                                                          | 5                                                                                                                | Yes                                                                                | The lecture series<br>gave a clear<br>picture of how<br>things work in a<br>pharma industry<br>and how important<br>scientists are to<br>the mankind and<br>society. Thank you<br>for such a<br>wonderful<br>opportunity.                     |
| 4        | SIR MVIT                                      | 4                                                                             | 4                                                                                                                    | 5                                                                                                       | 5                                                                                                         | 5                                                                                                          | 5                                                                                                                | Maybe                                                                              | None                                                                                                                                                                                                                                          |
| 5        | Sir Mvit                                      | 5                                                                             | 5                                                                                                                    | 5                                                                                                       | 5                                                                                                         | 5                                                                                                          | 5                                                                                                                | Maybe                                                                              | N/A                                                                                                                                                                                                                                           |
| 6        | Sir M Visvesvaraya<br>Institute of Technology | 5                                                                             | 5                                                                                                                    | 5                                                                                                       | 5                                                                                                         | 5                                                                                                          | 5                                                                                                                | Yes                                                                                | None. The lecture<br>series were very<br>informative and it<br>helped me gain a<br>lot of insights into<br>the drug discovery<br>field and I was<br>able to relate the<br>concepts learnt<br>while studying<br>Clinical and<br>Pharmaceutical |

| 7Sir MVIT55555NA8Image: Single state s                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7Sir MVIT55555YesNA8Image: Sin MVITImage: Sin MVITImage: Sin MVITImage: Sin MVITImage: Sin MVITImage: Sin MVIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 7Sir MVIT5555YesNA8Image: Sin MVITImage: Sin MVITImage: Sin MVITImage: Sin MVITImage: Sin MVITImage: Sin MVIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 7Sir MVIT5555558Image: Single state st                                                                                 |
| 7Sir MVIT555555NA8Image: Single state sta                                                                                          |
| 7Sir MVIT55555NA8Image: Single of the state of the stat                                                                                 |
| 7Sir MVIT55555YesNA8Image: Single on the state of the state                                                                                          |
| 7Sir MVIT555555NA8Image: Single on the state of the state o                                                                                          |
| 7Sir MVIT55555YesNA8Image: Single on the state of the state                                                                                          |
| 7     Sir MVIT     5     5     5     5     5     Yes     NA       8     Image: Single of the state of the                                                                                                |
| 8     Image: Section of the section of t |
| content of the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| lectures to our                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Sir M Visvesvaraya institute understanding and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| or technology 4 4 5 5 3 3 Yes knowledge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 9         Sir MVIT         5         4         5         5         5         Yes         NIL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 10         Sir MVIT         4         4         4         4         4         4         Yes         Good program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Have more such                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Sir MVII         5         5         5         5         5         7es         programs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 12         MVIT         5         5         5         4         5         Yes         Good                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Sir M Visvesvaraya institute very good                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| of technology 5 5 5 5 5 Yes programme                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 14     Sir MVII     4     5     4     5     5     Yes     need more like this       45     6     6     10     10     10     10     10     10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 15         Sir MVII         5         5         5         5         5         900           40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 10 very good                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 17 Sir MV/IT 5 5 4 4 5 5 Yes good                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 18         MVIT         5         5         5         5         5         7         9000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 19         Sir MV/IT         5         4         5         5         5         5         Yes         content was good                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Sir M Visvesvaraya institute                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Office/indiagy         5         5         5         5         5         7         7         9           21         examination         ex                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 21         Sir MVIT         5         5         5         5         5         Yes         None           20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 22         Sir MVIT         5         5         5         5         5         900 event                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 23         Sir MVIT         5         5         4         5         5         Yes         time was short                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 24         MVIT         5         5         5         5         Yes         None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 25         Sir MVIT         5         5         5         5         7es         need offline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 26         MVIT         5         5         5         5         Yes         NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| 27 | MVIT                                       | 5 | 5 | 5 | 5 | 5 | 5 | Yes | None                              |
|----|--------------------------------------------|---|---|---|---|---|---|-----|-----------------------------------|
| 28 | MVIT                                       | 5 | 5 | 5 | 5 | 5 | 5 | Yes | Very good                         |
| 29 | Sir MVIT                                   | 5 | 5 | 4 | 5 | 5 | 5 | Yes | Good                              |
| 30 | Sir M Visvesvaraya institute of technology | 5 | 4 | 5 | 5 | 5 | 5 | Yes | None                              |
| 31 | Sir MVIT                                   | 5 | 4 | 4 | 5 | 5 | 5 | Yes | none                              |
| 32 | Sir MVIT                                   | 5 | 4 | 5 | 5 | 5 | 5 | Yes | none                              |
| 33 | MVIT                                       | 5 | 4 | 5 | 5 | 5 | 5 | Yes | good                              |
| 34 | Sir MVIT                                   | 5 | 5 | 5 | 5 | 5 | 5 | Yes | enjoyed                           |
| 35 | Sir MVIT                                   | 5 | 4 | 5 | 5 | 5 | 5 | Yes | good talks                        |
| 36 | Sir MVIT                                   | 5 | 4 | 5 | 5 | 5 | 5 | Yes | need more such<br>programs        |
| 37 | Sir MVIT                                   | 5 | 4 | 5 | 5 | 5 | 5 | Yes | need practical exposure in future |
| 38 | Sir MVIT                                   | 5 | 4 | 5 | 5 | 5 | 5 | Yes | Good                              |
| 39 | Sir MVIT                                   | 5 | 4 | 5 | 5 | 5 | 5 | Yes | good                              |
| 40 | Sir MVIT                                   | 5 | 5 | 5 | 5 | 5 | 5 | Yes | NA                                |
| 41 | Sir Mvit`                                  | 5 | 5 | 4 | 4 | 4 | 4 | Yes | Good                              |
| 42 | Sir MVIT                                   | 5 | 5 | 4 | 4 | 4 | 4 | Yes | NA                                |



## Sir M Visvesvaraya Institute of Technology

Hunasamaranahalli, Bengaluru-562157

Department of Electronics & Communication Engineering

Date: 05/07/2021

To, The HOD, Dept. of ECE Sir MVIT

From, Seema S. Asst. Professor Dept. of ECE,Sir MVIT

Respected Sir,

**Sub:** Permission to conduct Student Development Program on "Hands on session on Signals and Control systems Engineering Applications using MatLab" from 14<sup>th</sup> to 16<sup>th</sup> July 2021.

With respect to above subject, we are planning to conduct a Student Development Programme on "Hands on session on Signals and Control systems Engineering Applications using MatLab" from 14<sup>th</sup> to 16<sup>th</sup> July 2021. This SDP introduces MATLAB for Signals and Systems and Control Systems applications. This program is beneficial for the 4th semester engineering students.

Kindly oblige.

Thanking you.

Coordinators:

Dr. Sasmita Mohapatra Mrs. Vani B. P. Mrs. Seema S. Mrs. Sheetal Bagali

**Dr. R Sundaraguru,** Professor & HOD, Department of ECE

Sri Krishnadevaraya Educational Trust's



Sir M. Visvesvaraya Institute of Technology Krishnadevaraya nagar, Hunasamaranahalli, International Airport Road,

Bangalore-562157

## Department of Electronics and Communication Engineering PG and Research Centre

## **Registration Form**

| SI.No. | Student Name             | Email ID                         |  |  |
|--------|--------------------------|----------------------------------|--|--|
| 1.     | Bhuvaneshwari            | 1MV17EC024@smvit.onmicrosoft.com |  |  |
| 2.     | Adarsh Abhay             | 1MV18EC003@smvit.onmicrosoft.com |  |  |
| 3.     | Sidharth Kumar Pandey    | 1MV18EC102@smvit.onmicrosoft.com |  |  |
| 4.     | Abdul Aleem              | 1MV19EC001@smvit.onmicrosoft.com |  |  |
| 5.     | Abhishek S Masgal        | 1MV19EC002@smvit.onmicrosoft.com |  |  |
| 6.     | Aditya Singh             | 1MV19EC005@smvit.onmicrosoft.com |  |  |
| 7.     | Akash Awasthi            | 1MV19EC006@smvit.onmicrosoft.com |  |  |
| 8.     | Akshay Myakeri           | 1MV19EC007@smvit.onmicrosoft.com |  |  |
| 9.     | Alok Kumar               | 1MV19EC008@smvit.onmicrosoft.com |  |  |
| 10.    | Aman Gupta               | 1MV19EC009@smvit.onmicrosoft.com |  |  |
| 11.    | Aman Shanti              | 1MV19EC011@smvit.onmicrosoft.com |  |  |
| 12.    | Anjali Kanthaliya        | 1MV19EC012@smvit.onmicrosoft.com |  |  |
| 13.    | Anubhav Jha              | 1MV19EC014@smvit.onmicrosoft.com |  |  |
| 14.    | Archana B R              | 1MV19EC015@smvit.onmicrosoft.com |  |  |
| 15.    | Arnab Chakraborty        | 1MV19EC016@smvit.onmicrosoft.com |  |  |
| 16.    | Arpit Kabra              | 1MV19EC017@smvit.onmicrosoft.com |  |  |
| 17.    | Aryan Dixit              | 1MV19EC018@smvit.onmicrosoft.com |  |  |
| 18.    | B Punit Kumar            | 1MV19EC022@smvit.onmicrosoft.com |  |  |
| 19.    | Bhaskar Jaiswal          | 1MV19EC023@smvit.onmicrosoft.com |  |  |
| 20.    | Bhavana U                | 1MV19EC024@smvit.onmicrosoft.com |  |  |
| 21.    | Bindushre S              | 1MV19EC025@smvit.onmicrosoft.com |  |  |
| 22.    | Chudesh Vanny V          | 1MV19EC026@smvit.onmicrosoft.com |  |  |
| 23.    | D H Gowda                | 1MV19EC027@smvit.onmicrosoft.com |  |  |
| 24.    | Devika.A                 | 1MV19EC031@smvit.onmicrosoft.com |  |  |
| 25.    | Devika S G               | 1MV19EC032@smvit.onmicrosoft.com |  |  |
| 26.    | Dhananjaya Miththanthaya | 1MV19EC033@smvit.onmicrosoft.com |  |  |
| 27.    | Dheeraj Kumar            | 1MV19EC034@smvit.onmicrosoft.com |  |  |
| 28.    | Disha Gandhi             | 1MV19EC036@smvit.onmicrosoft.com |  |  |
| 29.    | Dishant Banik            | 1MV19EC037@smvit.onmicrosoft.com |  |  |
| 30.    | Govind Jee               | 1MV19EC039@smvit.onmicrosoft.com |  |  |
| 31.    | Gudikal Sai Vamsi        | 1MV19EC041@smvit.onmicrosoft.com |  |  |
| 32.    | Harini Sampath           | 1MV19EC042@smvit.onmicrosoft.com |  |  |

| SI.No. | Student Name                     | Email ID                         |
|--------|----------------------------------|----------------------------------|
| 33.    | Himanshu Kumar Gupta             | 1MV19EC046@smvit.onmicrosoft.com |
| 34.    | Ishu Singh                       | 1MV19EC047@smvit.onmicrosoft.com |
| 35.    | Isukapalli Sai Krishnachaithanya | 1MV19EC048@smvit.onmicrosoft.com |
| 36.    | Jaisan                           | 1MV19EC049@smvit.onmicrosoft.com |
| 37.    | Ks Bhavishya                     | 1MV19EC050@smvit.onmicrosoft.com |
| 38.    | Kacharagadla Deepthi             | 1MV19EC051@smvit.onmicrosoft.com |
| 39.    | Kalyankumar Y M                  | 1MV19EC052@smvit.onmicrosoft.com |
| 40.    | Kandanoolu Kowshika Reddy        | 1MV19EC053@smvit.onmicrosoft.com |
| 41.    | Kartik Kesharwani                | 1MV19EC055@smvit.onmicrosoft.com |
| 42.    | Kavana.T.U                       | 1MV19EC056@smvit.onmicrosoft.com |
| 43.    | Kishan Kumar                     | 1MV19EC057@smvit.onmicrosoft.com |
| 44.    | Kodatala Yaswanth Reddy          | 1MV19EC059@smvit.onmicrosoft.com |
| 45.    | Komal Priya                      | 1MV19EC060@smvit.onmicrosoft.com |
| 46.    | Md Abdullah Anwar                | 1MV19EC066@smvit.onmicrosoft.com |
| 47.    | N B Vidhyashree                  | 1MV19EC068@smvit.onmicrosoft.com |
| 48.    | N S Prathveesh                   | 1MV19EC069@smvit.onmicrosoft.com |
| 49.    | Nikita Shrikant Pai              | 1MV19EC072@smvit.onmicrosoft.com |
| 50.    | Nikitha S Reddy                  | 1MV19EC073@smvit.onmicrosoft.com |
| 51.    | Payyavula Deepa                  | 1MV19EC077@smvit.onmicrosoft.com |
| 52.    | Piyush Prabhat                   | 1MV19EC078@smvit.onmicrosoft.com |
| 53.    | Prashant Kumar                   | 1MV19EC081@smvit.onmicrosoft.com |
| 54.    | Prathiksha A                     | 1MV19EC082@smvit.onmicrosoft.com |
| 55.    | Punit K N                        | 1MV19EC083@smvit.onmicrosoft.com |
| 56.    | Pushpanjali A V                  | 1MV19EC085@smvit.onmicrosoft.com |
| 57.    | Rahul Kumar                      | 1MV19EC086@smvit.onmicrosoft.com |
| 58.    | Rishabh Jain                     | 1MV19EC090@smvit.onmicrosoft.com |
| 59.    | Rishav Kumar Singh               | 1MV19EC093@smvit.onmicrosoft.com |
| 60.    | Ritik Kumar Singh                | 1MV19EC094@smvit.onmicrosoft.com |
| 61.    | Ritika Mishra                    | 1MV19EC095@smvit.onmicrosoft.com |
| 62.    | Rohini                           | 1MV19EC096@smvit.onmicrosoft.com |
| 63.    | Sandhya H                        | 1MV19EC099@smvit.onmicrosoft.com |
| 64.    | Sanket Gupta                     | 1MV19EC100@smvit.onmicrosoft.com |
| 65.    | Shashank G Naik                  | 1MV19EC103@smvit.onmicrosoft.com |
| 66.    | Shraddha V Goudar                | 1MV19EC105@smvit.onmicrosoft.com |
| 67.    | Shubham Srivastava               | 1MV19EC106@smvit.onmicrosoft.com |
| 68.    | Shubhra Dixit                    | 1MV19EC107@smvit.onmicrosoft.com |
| 69.    | Spoorthi Pk                      | 1MV19EC109@smvit.onmicrosoft.com |
| 70.    | Sricharan R Iyengar              | 1MV19EC110@smvit.onmicrosoft.com |
| 71.    | Sudarsh Tandon                   | 1MV19EC112@smvit.onmicrosoft.com |
| 72.    | Suhani                           | 1MV19EC114@smvit.onmicrosoft.com |
| 73.    | Supriyo Sadhukha                 | 1MV19EC116@smvit.onmicrosoft.com |
| 74.    | Syed Adnan                       | 1MV19EC117@smvit.onmicrosoft.com |

| SI.No. | Student Name             | Email ID                         |
|--------|--------------------------|----------------------------------|
| 75.    | V Deepashree             | 1MV19EC119@smvit.onmicrosoft.com |
| 76.    | Varshini N S             | 1MV19EC120@smvit.onmicrosoft.com |
| 77.    | Vidya S                  | 1MV19EC121@smvit.onmicrosoft.com |
| 78.    | Vikram S Bhat            | 1MV19EC122@smvit.onmicrosoft.com |
| 79.    | Vinutha H                | 1MV19EC124@smvit.onmicrosoft.com |
| 80.    | Vivek N Raj              | 1MV19EC125@smvit.onmicrosoft.com |
| 81.    | Yerramchetty Dwarakesh   | 1MV19EC127@smvit.onmicrosoft.com |
| 82.    | Bhuvana R                | 1MV19ET007@smvit.onmicrosoft.com |
| 83.    | Chandrika H A            | 1MV19ET008@smvit.onmicrosoft.com |
| 84.    | Charan S                 | 1MV19ET009@smvit.onmicrosoft.com |
| 85.    | Deepa N S                | 1MV19ET011@smvit.onmicrosoft.com |
| 86.    | Diksha Bhartia           | 1MV19ET013@smvit.onmicrosoft.com |
| 87.    | Ganavi R                 | 1MV19ET015@smvit.onmicrosoft.com |
| 88.    | K Jahnavi Devi           | 1MV19ET019@smvit.onmicrosoft.com |
| 89.    | Karun Sharma             | 1MV19ET020@smvit.onmicrosoft.com |
| 90.    | M A Mashitha             | 1MV19ET024@smvit.onmicrosoft.com |
| 91.    | Mohammed Hassaan Manna   | 1MV19ET028@smvit.onmicrosoft.com |
| 92.    | Olivia Kumar             | 1MV19ET029@smvit.onmicrosoft.com |
| 93.    | P Kalyan Kumar Reddy     | 1MV19ET030@smvit.onmicrosoft.com |
| 94.    | Ruchitha M               | 1MV19ET036@smvit.onmicrosoft.com |
| 95.    | Venna Venkata Siva Reddy | 1MV19ET045@smvit.onmicrosoft.com |
| 96.    | Ashok Kumar G            | 1MV20EC400@smvit.onmicrosoft.com |
| 97.    | Gagangowda K M           | 1MV20EC402@smvit.onmicrosoft.com |
| 98.    | Kiran K N                | 1MV20EC403@smvit.onmicrosoft.com |
| 99.    | Manasa G B               | 1MV20EC406@smvit.onmicrosoft.com |
| 100.   | Manoj.P                  | 1MV20EC407@smvit.onmicrosoft.com |
| 101.   | Vikas M                  | 1MV20EC410@smvit.onmicrosoft.com |



**Program Schedule** 

| Date       | Day       | Contents                                                                                                                                                                                                                                                                                                                                                            | Resource person |
|------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 14/07/2021 | Wednesday | Introduction to MATLAB<br>Generation of elementary signals<br>Plotting the graphs                                                                                                                                                                                                                                                                                   | Mrs. Seema S    |
| 15/07/2021 | Thursday  | Introduction to MATLAB live editor<br>Convolution of any two elementary<br>signals<br>Fourier Transforms of aperiodic signals<br>such as rectangular pulse and sinc<br>functions.<br>Sampling Theorem: All 3 cases plotted                                                                                                                                          | Mrs. Seema S    |
| 16/07/2021 | Friday    | Introduction to Control system Transfer<br>Functions, Poles-Zeros and Pole-zero<br>plot of a system, Response of a system<br>with step and impulse input for first and<br>second order system, Stability analysis<br>of system using Root locus, Bode and<br>Nyquist plots, Introduction to PID<br>controller and its real time<br>implementation and applications. | Mrs. Vani B P   |

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

SIR M VISVESVRAYA INSTITUTE OF TECHNOLOGY Krishnadevaraya Nagar, Hunasamaranhalli, Off Airport Road, Bengaluru-562157



Department of Electronics and Communication Engineering

## 3 Days Student Development Program

On "Hands on Session for Signals and Control Systems Engineering Applications using Matlab" 14<sup>th</sup> - 16<sup>th</sup> July 2021 (6-7 PM)

Organizers: Dr. V R Manjunath, Principal, Sir MVIT

Dr. R Sundaraguru, Professor & HOD, Dept. of ECE Faculty Coordinators: Dr. Sasmita Mohapatra Mrs. Seema S Mrs. Vani B P Mrs. Sheetal Bagali

Link for Registration: https://forms.gle/mWajt2ogVd91SwHK7 WhatsApp group link: https://chat.whatsapp.com/GMwfn8R6RBB223kExGTNMI



# Sri Krishnadevaraya Educational Trust's Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY

International Airport Road, Krishnadevaraya Nagar, Bengaluru, Karnataka 562157 Approved by AICTE | Affiliated to VTU. Belagavi | Accredited by NAAC

## **Department of Electronics and Communication Engineering**

## PARTICIPATION CERTIFICATE

presented to

## Diksha Bhartia

Department of ETE, Sir MVIT on successful participation in the 3 days Student Development Program on *"Hands on session for Signals and Control Systems Engineering Applications using MatLab"* organized by the Department of Electronics and Communication Engineering, Sir MVIT from *14th -16th July 2021*.

· Openningon

Dr R Sundaraguru HOD, Dept of ECE

Dr V R Manjunath Principal

Made for free with Certify'em



### **3 Days Student Development Program**

On

"Hands on session on Signals and Control systems Engineering Applications using MatLab"

## **Report**

The department of Electronics & Communication Engineering, conducted three days SDP on *''Hands on session on Signals and Control systems Engineering Applications using MatLab''* on 14<sup>th</sup> -16<sup>th</sup> July 2021. This SDP was sponsored by Sir KET.The Invitation for SDP was sent to 4<sup>th</sup> semester ECE and TCE students. The response was very good. Total number of participants were 100 in number. The registration started on 10<sup>th</sup> July 2021 online.

Inauguration started at 5.45 PM HOD, Dr. R. Sundaraguru, presided the inaugural function accompanied by Dr Sasmita Mahopatra, Associate professor, Dept. of ECE. Dr. Sasmita Mahopatra, Associate professor, Dept. of ECE, welcomed the Resource person for the program Mrs. Seema.S & Mrs. Vani B P and the participants. Dr. R. Sundaraguru, HOD, Dept. of ECE gave his presidential remarks and highlighted the importance of qualitative research. Inaugural function ended with vote of thanks.

On the first day, Mrs. Seema S., Assistant Professor, Dept. of ECE, Sir M.VIT, as a resource person started the first session at 6.00 pm with introduction to MATLAB and generation of elementary signals in signal processing.

Second day started with hands on session using MATLAB live editor. Instructions were given to use the live editor and simple programs on signal processing including Convolution, Fourier Transforms and their real time applications were discussed.

On Third day of the program Mrs. Vani B P Assistant Professor, Dept. of ECE, Sir M.VIT was the resource person, explained how MATLAB could be used in system design and analysis with transfer functions, response and stability analysis

of systems and also discussed the importance of PID controllers in real time designing.

On the third day, after the valedictory, feedback was received from the participants regarding the SDP. All three sessions were very informative, also queries raised from the participants were clarified. The three days SDP was conducted successfully.

## **Faculty Coordinators**

Dr. Sasmita Mohapatra, Associate Professor, Dept. of ECE Mrs. Vani B P, Assistant Professor, Dept. of ECE Mrs. Seema S. Assistant Professor, Dept. of ECE Mrs. Sheetal Bagali, Assistant Professor, Dept. of ECE

marce

**Dr. R Sundaraguru,** Professor & HOD, Department of ECE

Sri Krishnadevaraya Educational Trust's



## Sir M. Visvesvaraya Institute of Technology

Krishnadevaraya nagar, Hunasamaranahalli, International Airport Road,

Bangalore-562157

## **Department of Electronics and Communication Engineering**

**PG and Research Centre** 

## Feedback

| SI.<br>No |                                                             | Does the<br>program<br>helped to<br>Create,<br>select, and<br>apply                  | Does the<br>program<br>provides<br>methods<br>including<br>design of<br>experiments,<br>analysis and<br>interpretation<br>of data, and | Does<br>the<br>progr<br>am<br>given<br>openi | Course                                          |                                                                                                                                     |                                          |                                                                                       |
|-----------|-------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------|
|           | Full<br>Name(to<br>be printed<br>on the<br>certificate<br>) | appropriate<br>techniques,<br>resources<br>and modern<br>engineering<br>and IT tools | synthesis of<br>the<br>information<br>to provide<br>valid<br>conclusions                                                               | ng<br>for<br>life-<br>long<br>learni<br>ng!  | was<br>organiz<br>ed and<br>well<br>planne<br>d | What aspects<br>of this course<br>were most<br>useful or<br>valuable?                                                               | Over all<br>Feedback<br>about the<br>SDP | Any<br>Suggestio<br>ns for the<br>improvem<br>ent of the<br>program                   |
| 1         | Aditya<br>Singh                                             | Yes                                                                                  | Yes                                                                                                                                    | Yes                                          | Excelle                                         | Matlab was<br>interesting to<br>learn                                                                                               | Excellent                                | It was<br>overall<br>good                                                             |
| 2         | Harini<br>Sampath                                           | Yes                                                                                  | Yes                                                                                                                                    | Yes                                          | Excelle<br>nt                                   | Getting to<br>know how<br>versatile<br>MATLAB is.                                                                                   | Excellent                                | Weekly or<br>monthly<br>sessions<br>would be<br>good, to<br>know<br>more<br>about it. |
| 3         | Devika S<br>G                                               | Yes                                                                                  | Yes                                                                                                                                    | Yes                                          | Excelle<br>nt                                   | Valuable                                                                                                                            | Excellent                                | Nothing                                                                               |
| 4         | K S<br>Bhavishy<br>a                                        | Yes                                                                                  | Yes                                                                                                                                    | Yes                                          | Very<br>Good                                    | It gave an<br>overlook for<br>MATLAB.                                                                                               | Very<br>Good                             | It would<br>be better if<br>we had<br>more<br>lecturers.                              |
| 5         | Abhishek<br>s masgal                                        | Yes                                                                                  | Yes                                                                                                                                    | Yes                                          | Very<br>Good                                    | Analysing the<br>theory part<br>onto a more<br>technical sort<br>like<br>understanding<br>it with better<br>graphs was<br>the best. | Excellent                                | More on<br>how to<br>write the<br>programm<br>es                                      |