

## RajaRajeswari College of Engineering



(Approved by AICTE, New Delhi, Govt. of Karnataka, Affiliated to Visvesvaraya Technological University, Belagavi) #14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru – 560074

#### **Department of Robotics and Automation**

#### **Faculty Knowledge Enhancement**

NAME OF THE DEPARTMENT: Department of Robotics and Automation

1. Type of Event : AICTE – VTU Joint Teachers Training Programme

One Week Online Teachers Training Program On

"Introduction to Python Programming & its Applications"

2. Date of the programme  $: 13^{th} - 17^{th}$  March 2023

3. Faculty members participated: Dr.M.Karthikeyan, Professor and Head

Department of Robotics and Automation

RajaRajeswari College of Engineering

Bengaluru 560074

-Report prepared by Dr.M.Karthikeyan, HOD-R&A

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# **AICTE – VTU Joint Teachers Training Programme** VISVESVARAYA TECHNOLOGICAL UNIVERSITY



Centre for Post-Graduation Studies, VIAT, Muddenahalli, Chikkaballapur (Dist.) -562101 One Week Online Teachers Training Program

)n

"Introduction to Python Programming & its Applications"

13<sup>th</sup> – 17<sup>th</sup> March 2023

## Certificate

This is to certify that Mr. /Mrs. /Dr. /Prof. M Karthikeyan of RajaRajeswari College of Engineering has participated and successfully completed One Week AICTE–VTU Joint Teachers Training Programme on "Introduction to Python Programming & its Applications" from 13<sup>th</sup> to 17<sup>th</sup> March 2023 Organized by Visvesvaraya Technological University, Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur (Dist.) - 562101.

Dr. Thippeswamy K

Programme Coordinator
Introduction to Python Programming &
its Applications

Dr. N. Chikkanna

TU Coordinator, Professor & Chairman
Dept. of Aerospace Engineering
VTU CPGS, Muddenahalli.

Key-BE

Dr. Rangaswamy B E

Registrar Visvesvaraya Technological University, Belagavi.



## ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ



"ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ <mark>ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ</mark>

## Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)

Prof. B. E. Rangaswamy Ph.D.

Registrar

Ref. No.: VTU/ROB/2022-23/7-188

**Phone No:** (0831) - 2498100

Fax No.: (0831) - 2405467

Date: **≥8** MAR 2023

#### **CIRCULAR**

Sub: Deputation of Teaching Faculty Members of AICTE approved and VTU Affiliated Colleges for the AICTE-VTU Joint Training Programs (Online). Ref: Hon'ble Vice Chancellor's approval dated 07.03.2023.

With reference to the above subject, this is to inform you that, AICTE-VTU is jointly organizing the Training programme on the following courses. The objective of the Training programme is to enhance the faculty's expertise and teaching skills in the courses introduced as per NED 2020

	enhance the faculty's expertise and teaching skills in the courses introduced as per NEP 2020.				
Sl. No	Topic	Date	Programme Coordinators	Online Registration Link/ QR Code	
1	Introduction to Python Programming & its Applications	13 <sup>th</sup> -17 <sup>th</sup> March 2023 (5 Days)	Dr. K Thippeswamy, Professor, Dept. of Computer Science & Engineering, VTU PG Center, Mysore Mob: +91-7019605611 Email: thippeswamy@vtu.ac.in	https://forms.gle/nw7QrX7cA4XX	
2	Analog VLSI design using EDA Tools	20 <sup>th</sup> – 25 <sup>th</sup> March 2023 (22/03/2023 Holiday)	Dr. Sarika Raga, Associate Professor & Programme Coordinator, Dept. of Electronics & Communications Engineering, VTU CPGS, Muddenahalli. Mob: +91-9481470671 Email: raga.sarika@gmail.com	https://forms.gle/VxBVDc8WXChtkNJq9	
3	Introduction to Web Programming	27 <sup>th</sup> – 31 <sup>st</sup> March 2023 (5 Days)	Dr. Shivamurthy G, Associate Professor & Programme Coordinator, Dept. of Computer Science & Engineering, VTU CPGS, Muddenahalli. Mob: +91-9845603236 Email: kgshivam@gmail.com	https://forms.gle/F9fXzurMHT4Z BRhPA	
4	Introduction to Internet of Things (IoT)	17 <sup>th</sup> -21 <sup>st</sup> April 2023 (5 Days)	Dr. Nirmala Hiremani, Assistant Professor, Dept. of Computer Science & Engineering, VTU CPGS, Muddenahalli. Mob: +91-9483570925 Email: nirmalavtupg@gmail.com	https://forms.gle/FT1fBXKVnKwv fy4w9	
5	Robotics & Artificial Intelligence	24 <sup>th</sup> – 28 <sup>th</sup> April 2023 (5 Days)	Dr. Basawaraj, Associate Professor Dept. of Aerospace Engineering, VTU CPGS, Muddenahalli. Mob: +91-9986157177 Email: basawaraj.2009@gmail.com	https://forms.gle/YYG8NAWDAF	

For more information you may contact, Dr. N Chikkanna, TU Coordinator & Professor, Dept. of Aerospace Engineering, VTU CPGS, Muddenahalli, Mob. 9845629287

Hence, you are hereby requested to depute one or two Faculty Members of your college to the above said **Online** training program and encourage the faculty members to enrich their teaching skills. (There will be no Registration Fee)

By Order,

OSU2 > 2

Registrar

To,

- 1. The Principals of all the Affiliated / Constituent / Autonomous Engineering Colleges and School of Architecture of VTU.
- 2. The Chairpersons / Programme Coordinators of all the Departments, Centres for PG Studies of VTU in Muddenahalli, Belagavi, Kalaburgi and Mysuru.

#### Copy to:

- 1. The Hon'ble Vice Chancellor through his secretary, VTU, Belagavi for kind information.
- 2. The Finance Officer, VTU, Belagavi for kind information.
- 3. The Regional Directors (I/c), VTU Regional Centres at Bengaluru, Belagavi, Kalaburgi and Mysuru for information

# AICTE-VTU Joint Teachers Training Programme for AICTE Approved & VTU Affiliated Technical Institution Teachers

One Week Teachers Training Programme
On

"Introduction to Python Programming & Its Applications"

13<sup>th</sup> to 17<sup>th</sup> March 2023

#### **REGISTRATION FORM**

Name:			
Mobile:			
Mobile: Email:			
1			

#### **Declaration by the Applicant**

If selected, I agree to abide by the rules and regulations of the training Programme of VTU-HRDC and shall attend allthe sessions compulsorily.

Date: Signature of the Applicant

Recommended and Forwarded

Signature of the Head of the Institution

#### CHIEF PATRON

#### Dr. S Vidvashankar

Hon'ble Vice Chancellor, VTU, Belagavi

#### **PATRONS**

#### Dr. B.E. Rangaswamy

Registrar, VTU, Belagavi

#### Dr. T.N Sreenivasa

Registrar (Evaluation), VTU, Belagavi

Smt. M. A. Sapna

Finance Officer, VTU, Belagavi

#### Dr. Amit Kumar Srivastava

Director, FDC, AICTE, New Delhi

#### Dr. H R Sudarshana Reddy

Regional Director (I/c), VTU Regional Office, Bengaluru & Coordinator, VTU CPGS, VIAT, Muddenahalli

#### University Coordinator Dr. N Chikkanna

Professor & Chairman, Dept of Aerospace Engineering, VTU CPGS, VIAT, Muddenahalli

## Programme Coordinator Dr. K Thippeswamy.

Professor, Dept of CSE, VTU PG Centre, Mysuru

#### ORGANISING COMMITTEE

Dr. Dinesh Rangappa, Professor & Chairman, Dept. of Applied Sciences

Dr. T C Thanuja, Professor & Programme Coordinator, Dept of M.Plan in Smart Cities

Dr. Thirtha Prasad H P, Associate Professor & Programme Coordinator, Dept. of ME

Dr. Shiva Murthy G, Associate Professor & Programme Coordinator, Dept. of CSE

Dr. Sarika Raga, Associate Professor. & Programme Coordinator, Dept. of ECE

Dr. Roopadarshini S. Assistant Professor & Programme Coordinator, Dept. of MBA

Dr. G S Venkatesh, Professor, Dept of Mechanical Engineering

Dr. Basawaraj, Associate Professor, Dept. of Aerospace Engineering.

Dr. Anand Kumar C S. Associate Professor, Dept. of Applied Sciences

Dr. K Gayathri Reddy, Associate Professor, Dept. of MBA

Dr. Binov Mathew. Associate Professor. Dept. of MBA

Dr. H H Ramesha, Associate Professor, Dept. of MBA

Dr. Pankajakshi K, Associate Professor & Special Officer, VTU RO, Bengaluru

Dr. Nirmala Hiremani. Assistant, Professor, Dept. of CSE

Dr. Prasanna D S, Assistant. Professor, Dept. of Applied Sciences

Dr. Ashwin C Gowda, Assistant, Professor, Dept of Mechanical Engineering

Dr. Kantha D Devangavi, Assistant Professor, Dept. of CSE

Dr. Lakshminaravana K. Assistant Professor, Dept. of MBA

Dr. Veenarani K. Assistant Professor, Dept. of MBA

Mr. Sanjeev G Palekar, Assistant Professor, Dept. of Aerospace Engineering

Mr. Prasad U Raikar, Assistant Professor, Dept of Mechanical Engineering

Mr. Ravi H Talwar, Assistant Professor. & Special Officer, VTU RO, Bengaluru

Mrs. Renuka Malge, Assistant Professor, Dept. of CSE

Mr. Yadhu Naik B H. Assistant Professor, Dept. of CSE

Mrs. Bhavana G, Assistant Professor, Dept. of CSE

Mr. Vishwanath H. Assistant Professor, Dept. of MBA

Mr. Anand M Raikar, Research Scholar, Dept. of Aerospace Engineering

AICTE-VTU Joint Teachers Training
Programme for AICTE Approved & VTU
Affiliated Technical Institution Teachers

**One Week Teachers Training Programme** 

On

"Introduction to Python Programming & Its Applications"

13th to 17th March 2023





#### **Organized By:**

VTU- Human Resource Development Cell (HRDC)
Visvesvaraya Technological University
Centre for Post Graduate Studies Bengaluru
Region, Muddenahalli
Chikkaballapur-562101

**Venue: Online** 

Platform: Zoom App

#### About VTU

Visvesvarava Technological University (VTU) named after Bharat Ratna Dr. Sir M. Visvesvarava established on 1st April 1998, as per the VTU Act 1994 of the Government of Karnataka. University has been established by the Government of Karnataka in order to promote planned and sustainable development of technical education and has its Head Office located in Belagavi in the state of Karnataka. Reckoning the fact that, University is a seat of confluence of knowledge and as a technological University, Visvesvaraya Technological University does not restrict itself only to curricular activities but also emphasizes on the overall growth of knowledge in society and hence its campus in Belagavi is named antly as "Jnana Sangama". The University has jurisdiction over the whole state of Karnataka. VTU has established four regional centers at Bengaluru, Mysuru, Kalburgi and Belagavi for administrative convenience. VTU is one of the prestigious and largest technological Universities in the India having one Constituent College, 220 Engineering colleges and 20 Autonomous Colleges.

VTU is imparting technical education to more than a lakh students under its 35 Undergraduate & 94 Postgraduate Programmes. VTU is offering Doctoral Programmes in 865 departments in various affiliated Colleges which have been recognized as research centers. Around 5000 Research Scholars are perusing for Doctoral and M.Sc. (Engineering) By Research Programmes. VTU has established full-pledged Centers for Post Graduate Studies at Muddenahalli, Kalburgi, Belagavi and Mysuru.

#### About AICTE, New Delhi

All India Council for Technical Education (AICTE) was set up in November 1945 as a national-level apex advisory body to conduct a survey on the facilities available for technical education and to promote development in the country in a coordinated and integrated manner. And to ensure the same, as stipulated in the National Policy of Education (1986). AICTE was vested with:

- Statutory authority for planning, formulation, and maintenance of norms & standards
- Quality assurance through accreditation
- Funding in priority areas, monitoring, and evaluation
- Maintaining parity of certification & awards.

#### About the VTU PG Centre, Muddenahalli

The Visvesvaraya Technological University, Post Graduate Center, Bengaluru Region, Muddenahalli has 200 acres campus located at Muddenahalli, Chikkaballapura (Dist). Muddenahalli is the birth place of great legend Bharata Ratna Sir M. Visvesvaraya. It has all necessary infrastructure required for imparting quality education through its well-structured administrative and academic staff for overall development of student's personality. Center for PG Studies has five full time post graduate Programmes in M.Tech, MBA and MCA. All the departments have well qualified faculty.

#### PROGRAMME OBJECTIVES:

This Python Programming FDP leads faculty from the basics of writing and running Python scripts to more advanced features such as file operations, regular expressions, working with binary data, and using the extensive functionality of Python modules. Extra emphasis is placed on features unique to Python, such as tuples, array slices, and output formatting.

#### **PREREQUISITES**

Participants should already be comfortable using the operating system (Linux, Unix, Windows, Solaris, macOS, etc.) on which they will be running Python. While not mandatory, basic skills with at least one other programming language are desirable.

#### **Advantages of this workshop of Python Programming:**

There are a number of advantages when a Institute / College/ Faculty / Student chooses to be socially connect and responsible, such as:

- Master the fundamentals of writing Python scripts
- Learn core Python scripting elements such as variables and flow control structures
- Discover how to work with lists and sequence data
- Write Python functions to facilitate code reuse
- Use Python to read and write files
- Make their code robust by handling errors and exceptions properly
- Work with the Python standard library
- Explore Python's object-oriented features
- Search text using regular expressions

This workshop also summarizes the main points of the university defined syllabus titled "Introduction to Python Programming & Its Applications". It also functions as a platform for brainstorming, in-depth discussion, and clarifying the doubts of faculties who are willing to teach this course. This workshop helps all faculties and students to increase their understanding of Introduction to Python Programming, Practice sustainability and creativity, Showcase planning and organizational skills of all the stakeholders.

#### RESOURCE PERSONS:

Renowned Experts from reputed Institutions, Senior Faculties of VTU and Industry Experts.

#### **Eligibility:**

Teachers from AICTE Approved and VTU Affiliated Technical Institutes those who are interested in teaching the "Introduction to Python Programming" course.

#### **Registration Fee:**

No Registration Fee

#### How to Apply:

Registration through Google form link https://forms.gle/nw7QrX7cA4XXbP2UA

#### **Programme Timings (Each Dav):**

- (i) First session; 10.00 AM to 1.00 PM (3 hours).
- (ii) Lunch break: 1.00 PM to 1.30 PM
- (iii) Second session: 1.30 PM to 4.30 PM (3 hours).

#### Certificate:

The certificate of participation for the faculty who registers for the Programme shall be issued, provided they satisfy the attendance requirement of 80 % of the 10 sessions held during five days of the Programme and secure 60 % of the maximum marks (100) prescribed for formative evaluation and summative evaluation.

#### **Contact for more Information:**

#### Dr. K. Thippeswamy

Professor, Dept of CSE VTU PG Centre, Mysuru

Mobile: 9448500224, 7019605611 Email: thippeswamy@vtu.ac.in



### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belagavi – 590018, Karnataka, India

(State Technological University, Govt. of Karnataka) Center for Post-Graduation Studies, Muddenahalli, Chikkaballapur-562101

AICTE-VTU Joint Training Programme for AICTE Approved & VTU Affiliated Technical Institutions Teachers
One Week Training Programme on

"Introduction to Python Programming & Its Applications" 13th to 17th March 2023

## **Inauguration Schedule**

10.00AM - 10.05 AM	Welcome Address	Dr. N.Chikkanna Technical University Coordinator-AICTE& VTU – Joint Training Programme, Professor VTU PG Centre, VIAT, Muddenahalli.
10.05 AM - 10.10 AM	Prelude About FDP	Mr. Dharnish Ranganathappa Engineering Manager Capgemini, Bengaluru.
10.10 AM - 10.20 AM	Address by Chief Guest	Dr. Vidyashankar S Hon'ble Vice Chancellor, Visvesvaraya Technological University, Belagavi
10.20 AM - 10.30 AM	Vote of Thanks	Dr. K Thippeswamy Professor, Dept of CSE VTU, PG Centre, Mysuru

Master of Ceremony: Prof. Pushpalatha R, Asst. Professor, Dept of CSE, VTU PG Centre, Mysuru.



### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belagavi – 590018, Karnataka, India

(State Technological University, Govt. of Karnataka)
Center for Post Graduate Studies, VIAT, Muddenahalli, Chickaballapura-562101

AICTE-VTU Joint Training Programme for AICTE Approved & VTU Affiliated Institution Teachers **5 Days Training Programme on** 

"Introduction to Python Programming & Its Applications"  ${\bf 13}^{\rm th}~to~17^{\rm th}~March~2023$ 

## **Programme Schedule**

Frogramme Schedule				
	10.00 - 10.30 am	Inauguration of Training Programme	Dr. Vidyashankar S Hon'ble Vice Chancellor, Visvesvaraya Technological University, Belagavi	
			Dr. N.Chikkanna Technical University Coordinator, Professor & Chairman, Dept. of Aerospac Engineering, VTU PG Centre, VIAT, Muddenahalli	
13.03.2023			Dr. K Thippeswamy Professor & Programme Coordinator Dept of CSE, VTU, PG Centre, Mysuru	
	10.30 am - 12.00noon	Keynote Address on "Python Programming"	Mr. Dharnish Ranganathappa Engineering Manager Capgemini, Bengaluru.	
	1.00 - 1.30 pm Lu		unch Break	
	1.30 - 4.30 pm	Importance of Python Programming& Its Applications	Mr. Dharnish Ranganathappa Engineering Manager Capgemini, Bengaluru.	
	10.00 am - 1.00 pm	Introduction to Python Basics, Flow control & Hands-on	Dr. Maya B.S Assistant Professor Dept of CSE, BIT, Bengaluru	
14.03.2023	1.00 - 1.30 pm			
	1.30 - 4.30 pm	Python Functions	Dr. Maya B.S Asst. Professor Dept of CSE, BIT,Bengaluru	
	10.00 am- 1.00 pm	Python Lists with Hands on	Dr Kumar P.K Asst. Professor Dept of CSE, VTU PG Centre, Mysuru	
15.03.2023	1.00 - 1.30 pm	Lunch Break		
	1.30 - 4.30 pm	Dictionaries and Structuring Data	Dr Kumar P.K Asst. Professor Dept of CSE, VTU PG Centre, Mysuru	
	10.00 am - 1.00 pm	Manipulating Strings, Reading and Writing Files	Dr Mahesh Lohith K S Associate Professor ATME, Mysuru	
16.03.2023	1.00 - 1.30 pm		unch Break	
	1.30 - 4.30 PM	Organizing Files, Debugging	Dr Mahesh Lohith K S Associate Professor ATME, Mysuru	
	10.00 AM - 01.00 PM	Classes and objects, Classes and functions	Mr. Kamal Govindraj Chief Architect @ Groww Bengaluru	
17.03.2023	1.00 - 1.30 pm	Lunch Break		
	1.30 - 3.00 PM	Classes and methods	Mr. Kamal Govindraj Chief Architect @ Groww Bengaluru	

3.00 PM – 3.30 PM	Valedictory Function
3.30 PM – 4.30 PM	Online Test

#### Dr. K Thippeswamy

Professor & Programme Coordinator Dept of CSE, VTU, PG Centre, Mysuru Mob: 7019605611 Dr. N.Chikkanna

TU-Coordinator, Professor & Chairman, Dept. of Aerospace Engineering, VTU PG Centre, VIAT, Muddenahalli. Mob: 9845629287

Email – nchikkanna1967@gmail.com

Email: thippeswamy@vtu.ac.in

Link to Attend the Online Webinar:

https://us06web.zoom.us/j/82742610391?pwd=SlITNWE5ek1NLzlFcTE0R0d5UW13QT09