

**National level  
Short Term Training Programme (STTP)  
on  
Applied Mathematics using Python  
through Hands-on Experience**

**February 10-14, 2020**

**REGISTRATION FORM**

Name: .....

Designation: .....

Organization: .....

Qualification: .....

Correspondence Address: .....

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Mobile No.: .....

E-Mail: .....

Registration Fee: Paid herewith in the  
form of Cash/DD/online payment mode

Amount .....

Transaction ID. /DD No.: .....

Date : .....

Name of the Bank.....

Accommodation Required: Yes / No

(Availability on payment basis)

Date:

Place:

Signature

Note:

- For online Registration go through the following link: [www.nitr.ac.in](http://www.nitr.ac.in). Online payment should be made to the following Account No.: 38027633250. Name : Director, NIT Raipur IFSC code: SBIN0002852
- Demand draft should be in favor of **Director, NIT Raipur**, payable at Raipur.
- Photocopies of registration form may be used.

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*Associate Professor  
Department of Mathematics*

**Coordinator**  
Dr. M. Krishna Prasad

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**National level  
Short Term Training Programme (STTP)  
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**Organized by  
Department of Mathematics**



**National Institute of Technology  
Raipur-492 010  
Chhattisgarh, India.**

### About the Institute:

**National Institute of Technology Raipur** (Formerly Government Engineering College Raipur), situated in the capital of a newly incepted state of Chhattisgarh, has proven to be "avant-grade" in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our president Hon'ble Dr. Rajendra Prasad on 14<sup>th</sup> September 1956, the institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by our Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14<sup>th</sup> March 1963. From 1<sup>st</sup> December 2005, the institute has become the National Institute of Technology. It is well connected with Mumbai, Delhi, Hyderabad, Kolkata, Bhopal, Ahmedabad, Bangalore, Chennai and Chandigarh by regular flights and is on the main Howrah-Mumbai railway route. The institute is 5 km from the Raipur railway station and 18 km from airport on NH-6, the Great Eastern Road.

### About Department:

The **Department of Mathematics** came in existence since 1956. The department provides an outstanding research environment and offers academic program leading to the award of Ph.D. degree. Apart from this, department taking care of Mathematical input to all undergraduate and postgraduate courses in Engineering and Computer Science Applications.

#### Venue:

**Department of Mathematics,  
NIT Raipur (CG) – 492 010, INDIA**

### Objective:

The purpose of this course is to provide up-gradation of knowledge and skills for research scholars/faculties/scientists involved in active research. This course will also provide in depth exposure to them. The lectures will be delivered by distinguished experts in their field. The five days short term course will include lectures, special case studies on the areas of Applied Mathematics as well as a hand on practical experience in Python.

### Theme/Scope:

The five days STTP on “**Applied Mathematics using Python through Hands-on Experience**” will bring together a group of experts in Python in NITRR. Python is a free, open source language and environment that has tremendous potential for use within the domain of scientific computing. Python is an effective tool to use when coupling scientific computing and mathematics. This STTP demonstrates Python in tight connection with mathematical applications. Further, this STTP is devoted to explain the various concepts in Python for computing purposes like linear algebra, arrays, plotting, iterating, functions, and much more. The STTP will also address all-level researchers, and is aimed to help shaping future research directions and creating opportunities for new interdisciplinary collaborations.

### Topics to be covered:

- Introduction to Python, Basic concepts
- Vector and array manipulation
- Plotting, functions, input and output
- Sequences and difference equations
- Linear Algebra, Numerical methods
- Symbolic computations with SymPy
- Introduction to discrete calculus and differential equations

### Targeted Participants:

- Academicians
- Industry Professionals
- Students and Research Scholars

### Registration Fee Details (in INR):

Participants	Amount (in Rs)
Students	1000
Faculty	2000
Industry Delegates	2500

Applications in prescribed format along with the receipt of online registration fee payment must reach the coordinators on or before 5<sup>th</sup> February, 2020. Registration fee includes registration kit, tea and lunch during the program. Candidates need to send the DD drawn/online receipt along with registration form to the coordinator. Registration fee is not refundable once the candidate has done payment. Since the number of seats is limited to 25, the selection will be made on *first-cum-first-serve basis only* and intimation will be sent to the candidates by email as per the schedule. Certificates will be issued to the participants only after attending the complete course. No TA/DA will be paid to the participants. **Candidates have to bring their own laptop.**