

About the Institute:

National Institute of Technology Raipur (Formerly Government Engineering College Raipur), situated in the capital 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 14th 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 14th March 1963. From 1st 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.

Chief Patron

Dr. A. M. Rawani
Director, NIT Raipur

Patron

Dr. S. Gupta
Dean (R&C), NIT Raipur

Coordinators

Dr. Arvind Kumar Sinha

and

Dr. Anup Kumar Sharma

Organizing Committee Members

Dr. D. Mishra, *NIT Raipur*
Dr. Sujit Kumar Samanta, *NIT Raipur*
Dr. Sharada Nandan Raw, *NIT Raipur*
Dr. M. Krishna Prasad, *NIT Raipur*
Dr. Nilesh Kumar Thakur, *NIT Raipur*
Dr. Deepmala Sharma, *NIT Raipur*

Address for Correspondence

Dr. Anup Kumar Sharma
Assistant Professor
Department of Mathematics
NIT Raipur (CG) - 492 010
Email: aksharma.maths@nitrr.ac.in
Contact No.: 09199454963



Sponsored by

AICTE training and Learning (ATAL) Academy

National FDP
on

**“Data Science with Statistical Methods
using R Programming: Contribution and
Developments”**

September 21-25, 2020



Organized by
Department of Mathematics



**National Institute of Technology
Raipur - 492 010
Chhattisgarh, 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 National Workshop will include lectures, special case studies on the areas of Statistics as well as a hand on practical experience in R.

Theme/Scope:

The five days National FDP on “**Data Science with Statistical Methods using R Programming: Contribution and Developments**” will bring together a group of experts in Statistics in NIT Raipur. This is a scientific and technological character event and aim to bring together professionals working in AICTE approved engineering colleges and persons work in Industry / R & D Organizations, students, and researchers of engineering and related sciences. The scope of the presentations will include theoretical development of statistics and its application in Engineering, Science and Technology, and any interdisciplinary combination that is not yet standard in the field. This program will introduce for beginners which is helpful for writing programming. The National FDP will also address all-level researchers and is aimed to help shaping future research directions and creating opportunities for new interdisciplinary collaborations.

Targeted Participants:

- Academicians
- Industry Professionals
- Students and Research Scholars

Registration Fee (in INR): NIL

Topic to be covered:

1. Introduction to Data Science
2. Statistical Methods for Data Science
3. Sample Surveys in Data Sciences
4. Basic Probability Distribution in Data Sciences
5. Testing of Hypothesis in Data Sciences
6. Data Science Vs Machine Learning
7. R-Programming for Data Science
8. Predictive Modeling for Data Science
9. R Linear Regression Analysis
10. R Multiple Linear Regression Analysis
11. R Nonlinear Regression Analysis
12. R Decision Trees
13. R Cluster Analysis
14. R Graphical Models
15. R Predictive and Descriptive Analytics
16. R Normal Distribution
17. R Cluster Analysis
18. R Data Visualization
19. R Classification
20. R Chi-Square Test

NOTE:

- *It is limited for 200 participants based on first come first serve*
- *A test shall be conducted by coordinators at the end of the program. The certificate shall be issued to those participants who have attended the program with 80% attendance and scored minimum 60% marks in the test.*

Venue:

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

Invited Speakers:

- ❖ Dr. G. N. Singh,
Professor & Head
Department of Mathematics &
Computing
IIT (ISM) Dhanbad
- ❖ Dr. R. K. Jana,
Operation & Quantitative Methods
Area
Assistant Professor
IIM Raipur
- ❖ Dr. S. Kayal,
Assistant Professor
Department of Mathematics
NIT Rourkela
- ❖ Dr. D. Maheta
Assistant Professor
Department of Business and Industrial
Management
VNSGU Surat
- ❖ Mr. Saurabh Agarwal
Assistant Professor
Department of Civil Engineering
HBTU Kanpur

Registration Process:

- Course Registration is free for all participants
- Registration is through online mode only.
- Use following link for online registration:
<https://www.aicte-india.org/atal>