

National Level
SHORT TERM TRAINING PROGRAMME
ON

MATHEMATICAL MODELING AND
COMPUTATIONAL TECHNIQUES
IN SCIENCE & ENGINEERING

March 14-18, 2016
(Under TEQIP)



CO-ORDINATORS

Dr. Arvind Kumar Sinha
Assistant Professor & HOD

Dr. Sharada Nandan Raw
Assistant Professor

Dr. Sujit Kumar Samanta
Assistant Professor

ORGANIZED BY:
Department of Mathematics
National Institute of Technology
Raipur (C.G.) - 492 010, INDIA.



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 railways 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 Post-Graduate courses in Engineering and Computer Science Applications.

Venue

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

Objective

In advanced of science and technology, mathematical modeling and computational techniques play a vital role to solve the real world problems. It helps to understand how mathematical models are formulated, solved and interpreted. It also appreciates the power and limitation of mathematics to solve the practical problems. With advent of high speed computing machines the research in different fields of science and engineering has shifted to theoretical to computational techniques. Computational methods have emerged as one of the indispensable tools in solving the related to different field of science and engineering.

The field of science and engineering are facing unparallel changes and consolidations. As educators, we must be continuously aware of these developments so that we can not only define a fixed path but also we have to take full advancement in science and technology. Keeping view of the current trust, relevance and importance of the development in science and engineering, the researchers of technical institute have to keep a place with its exchanging trends for social and industrial benefits. Researchers and Scientists have applied mathematical modeling and computational methods as a tool to represent the various problems in real word situations.

The aim of the Short Term Training Programme (STTP) is to introduce the recent developments and applications of mathematical modeling and computational techniques to problems of various fields of engineering and science. The purpose of this programme is to train the faculty members, research scholars, young scientists, and post graduates students of various organizations. This programme gives the basic ideas about mathematical modeling & computational techniques, and applying them in representing and solving the scientific and engineering problems. This programme also offers an exciting opportunity to students who are interested in mathematics and who wish to pursue courses for industry, research and teaching.

Course Outline:

Introduction and Basic Concepts of Mathematical Modeling & Computational Techniques; Basic concepts of linear, nonlinear optimization problems & solution techniques and its applications; Mathematical modeling using Ordinary Differential Equations (ODEs) and Partial Differential Equations (PDEs); Finite Volume/Difference methods for PDEs; Computational techniques and modeling in Fluid Dynamics; Basic concepts to LaTeX; Introduction to MATLAB and MAPLE and its applications in real world problems.

IMPORTANT DATES

Last date of receipt of application: 08.03.2016
Notification about selection (By Email): 09.03.2016

Eligibility

Participation in this Short Term Training Programme (STTP) is open to the Faculty members, Research scholars, and UG/PG students of Science and Engineering streams. It is also open to the Mathematicians, Scientists and Engineers who are working in the R&D organizations, industry and who wish to gain basic understanding of the concepts involved.

Selection

Since the number of seats is limited to 25, the selection will be made on first cum first serve basis 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. Accommodation may be provided on availability and on payment basis at institute guest house and relevant hostels of NIT provided request for the same is made in the registration form.

Address of Correspondence

Co-ordinators

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Assistant Professor

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Dr. Sujit Kumar Samanta
Assistant Professor

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Contact No.: 09575509285

PATRON

Prof. Sudarshan Tiwari
Director, NIT Raipur

RESOURCE PERSONS

Eminent Professors and experts from reputed Departments of this Institution and other Institutions.

ORGANIZING COMMITTEE

Prof. R. P. Pathak, NIT Raipur
Dr. Debasisha Mishra, NIT Raipur
Dr. M. Krishna Prasad, NIT Raipur
Dr. N. K. Thakur, NIT Raipur
Dr. Deepmala Sharma, NIT Raipur
Dr. Govardhan Bhat, NIT Raipur

ADVISORY COMMITTEE

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Prof. H. K. Pathak, Pt. R.S.U. Raipur
Dr. G. S. Singh, TEQIP Nodal Officer (Fin) GEC Bilaspur
Dr. V. N. Singh, TEQIP Member GEC Raipur
Dr. Subir Das, IIT BHU
Dr. Manoj Kumar, MNNIT Allahabad
Dr. Punam Gupta, Sagar University (MP)

REGISTRATION FEE

For Industrialists	Rs. 2000/-
For Faculty members	Rs. 1500/-
For Students / Research Scholars	Rs. 1000/-

Note:

(i) Only Breakfast, Lunch and Tea will be provided.
(ii) Fee is non-refundable.

REGISTRATION FORM

National Level
Short Term Training Programme
On

**Mathematical Modeling and Computational
Techniques in Science & Engineering**

March 14-18, 2016

Under TEQIP

Organized by
Department of Mathematics
NIT, Raipur

Full Name (Block Letter):

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Male/Female:

Name of College/Institution/Organization:

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Qualification:

Designation:

Address:

.....

.....

Pin code:

Phone No.:

Mobile No.:

E-mail:

Do you need accommodation: (Yes/ No):

I have enclosed the registration fee of
Rs.....by Cash/D.D. No
Dated.....in favour of "Director, NIT, Raipur"
payable at SBI, GCET Raipur Branch.

Place:

Date:

Signature of the participant

Duly filled registration form must reach to Co-ordinators before last date of receipt of registration form by post/by hand along with registration fee.