#### **COURSE OBJECTIVES**

The objective of the course is to arm the participants with the necessary ideas and methods so that when some mathematical computation appears in research, one can tackle them with confidence, possibly for further independent study into specialized areas. Its major role is to summarize, crystallize, enhance and give a full forward orientation to various computational methods in the popular areas like differential equations, numerical techniques, mathematical modeling, optimization, control theory and statistical analysis of data.

#### COURSE CONTENTS

- Special functions and Lie theory
- Existence and Uniqueness of solution of Differential equations
- Numerical Analysis of Differential equations
- Fractional Calculus and their engineering applications
- Lie Theory and its connection with special function theory
- Numerical methods for Differential equations
- Deformation of Lie Algebras and their representations
- Robotics and Control theory
- Approximation Theory
- Fluid Dynamics
- Mathematical foundation of Key Management System

#### **Intended Audience:**

Faculty members / Research scholars / P.G. students / Industry professionals from Research Institutions/ Academic Institutions/ Universities can attend the course. The selection will be made on first come first serve basis in the range of 30 to 50. Selected number of participants will be invited to attend the course by email only. Certificates will be presented to the participants in the valedictory ceremony on the last day of the course.

#### **Important Dates:**

Last date for Registration: 08.02.2023 Last Date for Intimation of acceptance: 10.02.2023

#### **Registration Fee Details**

The registration fee per participant is as under:

Participants	Without Accommodation
Research Scholar /Students (P.G &M.Phil.)	Rs. 1000/-
Faculty/Academician	Rs. 3000/-

#### \*Registration fee is non-refundable.

The Registration fee includes the course kit, Course Certificate, High tea, Lunch, Tea/coffee during session breaks. Accommodation and dinner will be provided in hostels on payment basis.

No TA/DA will be paid to the participants.

\*The Registration fee is to be paid through SBI Collect. Please save a copy of payment receipt.

#### How to apply:

Interested candidate can apply through the google form. https://forms.gle/Hkdu5BcKvHjTqYbG7

#### **About the Coordinating Department**

Department of Mathematics was established in 1966 with Professor P.D. S. Verma (D.Sc.) as the founder Chairman, is a well-known center for education and research in Mathematics. It has undergraduate programs with opportunities for specialization in all major areas of Mathematics leading to Doctorate degree. In particular, the department offers excellent courses to the students of B. Tech and Ph.D. programs, which are of special interest and are rewarding to many students in getting admission abroad for further higher studies.

#### **REGISTRATION FORM**

A Short Term Course On

## Current Trends in Mathematics and Applications (STCCTMA-2023)

February 13 - 17, 2023

Name:
Designation:
Organization:
Address for Correspondence:
Phone:
E-mail:
Qualifications:
Accommodation required: Yes/No
If Yes, Specify the dates:
Payment Details: * SBI Collect Receipt No.:
Issuing Bank:
Amount:
Deter

(Signature of applicant)

\*In favor of "Director, National Institute of Technology, Kurukshetra" payable at Kurukshetra

#### A SHORT TERM COURSE

On

Current Trends in Mathematics and Applications (STCCTMA-2023) (As part of Diamond Jubilee Celebrations)

February 13 - 17, 2023

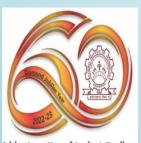
# PATRON Dr. B.V. Ramana Reddy Director, NIT Kurukshetra

#### **CONVENER**

**Dr. Paras Ram**HOD, Mathematics
NIT Kurukshetra

#### **COORDINATORS**

Dr. Sarasvati Yadav Dr. Amit Prakash



Celebrating 60 Years of Academic Excellence

DEPARTMENT OF MATHEMATICS

NATIONAL INSTITUTE OF TECHNOLOGY

KURUKSHETRA-136119, INDIA

#### **About the Institute**

National Institute of Technology, Kurukshetra, one of the 31 NITs in the country, is a premier centre of learning and research in various disciplines of Engineering and Management. It trains and develops high caliber professionals to serve not only the country but the world at large. Established in 1963 as an REC – a joint enterprise of the Government of India and the Government of Haryana – the Institute was elevated to a National Institute with Deemed University in June 2002. The Institute has made rapid strides in expanding and upgrading facilitates, enhancing the quality of education and strengthening the linkage with industry. The Institute alumni are well placed in reputed organizations in India and abroad.

#### About Kurukshetra

Kurukshetra is a place of great historical and religious importance, revered all over the country for its sacred association with the Vedas and the Vedic Culture. It was here that the battle of Mahabharat was fought and Lord Krishna preached his Philosophy of 'KARMA' as enshrined in the Holy Bhagwad-Gita, to Arjuna at Jyotisar.

Kurukshetra is spread over, a circuit of about 48 KOS which includes a large number of holy places, temples and sacred tanks connected with the religious events/rituals. Historically, during medieval period, Thanesar, the old name of Kurukshetra city, was the seat of power of King Harshwardhana.

Kurukshetra is well connected with rail/road. The Kurukshetra Railway Junction is on Delhi-Ambala section. It is situated on National Highway No. 44 connecting New Delhi to Ambala. The approximate distance of the place is 160 km from Delhi and 100 km from Chandigarh. Pipli is the place on NH-44 to get down for NIT Kurukshetra and a 10 km drive by Auto or Cab takes one to NIT Kurukshetra. Nearby airports are Chandigarh and New Delhi.

Shimla, Kasauli, Morni Hills are nearby Hill stations for weekend leisure.

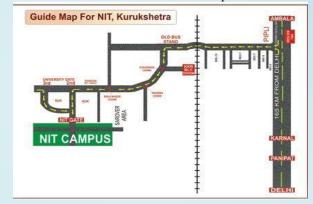


## NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

Address for sending soft copy of Registration form:  $\underline{math.nitkkr@gmail.com}$ 

Correspondence Address:
DR. AMIT PRAKASH
Department of Mathematics
NIT Kurukshetra-136119, Haryana, INDIA
Contact No.: 8950118721

How to reach NIT Kurukshetra from Pipli on NH 44



### SHORT TERM COURSE

#### On

## CURRENT TRENDS IN MATHEMATICS AND APPLICATIONS (STCCTMA-2023)

## February 13-17, 2023

### Guidelines for fee deposit for STC through SBI collect:

#### **REGISTRATION FEES**

Participants	Without Accommodation
Research Scholar /Students (P.G &M.Phil.)	Rs. 1000/-
Faculty/Academician	Rs. 3000/-

## Please consider following steps to make the payment for registration:

- 1. Go to link: State Bank Collect (onlinesbi.sbi)
- 2. Accept terms and conditions and then click on proceed.
- 3. Select State Haryana.
- 4. Type of corporate/institutions- select educational institutions then click on go.
- Educational institutions name- select Director, National Institute of Technology,
   Kurukshetra and then submit.
- 6. Select payment category-Registration fee for STC on STCCTMA-2023.
- 7. Fill the registration details and submit.

## **REGISTRATION FORM**

## A Short-Term Course On

## $Current\ Trends\ in\ Mathematics\ and\ Applications\\ (STCCTMA-2023)$

February 13 - 17, 2023

NAME:

**DESIGNATION:** 

Kurukshetra

\*\*For SBI collect: Follow the Guidelines

ORGANIZATION:

ADDRESS FOR CORRESPONDENCE:
PHONE:
E-MAIL:
QUALIFICATIONS:
ACCOMMODATION REQUIRED: YES/NO
IF YES, SPECIFY THE DATES:
PAYMENT DETAILS: * SBI COLLECT RECEIPT NO.:
ISSUING BANK:
AMOUNT:
DATE:

\*In favor of "Director, National Institute of Technology, Kurukshetra'' payable at

(Signature of applicant)