

## ABOUT THE WORKSHOP

Numerical methods are vital in solving various mathematical models that arise while solving Engineering problems. This workshop aims to give the participants a detailed exposure and understanding of advanced numerical methods for solving Ordinary and Partial Differential Equations. It is expected that the participants will be able to implement the same in their respective research areas at the end of the workshop. The workshop will mainly cover the topics like Finite Difference Methods, Finite Element Methods, Spectral Methods, Homotopy Analysis Method, Homotopy Perturbation Method, Numerical Methods for Boundary Value Problems: Shooting method, Keller-Box method etc.

## OBJECTIVES OF THE WORKSHOP

The specific objectives of the workshop are:

- ☑ Introducing fundamentals of various numerical techniques for solving ordinary and partial differential equations.
- ☑ To discuss the applicability of numerical techniques in various engineering and research problems.
- ☑ To provide a strong background to the participant to implement these techniques in their area of research/interest.

## E-Certification

E-certificates will be provided to the participants having minimum 80% attendance during the sessions.

## TARGET AUDIENCE

The workshop will be extremely useful for post-graduate students and research scholars interested in pursuing research in the field of Applied Mathematics. Moreover, it is expected that the workshop will be beneficial for researchers/faculty members working in the field of applied mathematics.

## CONTACT DETAILS

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A  
Five-Day International  
Online Workshop  
on  
**Advanced Numerical Techniques  
for  
Differential Equations**  
**ANTDE-22**

06th to 10th June 2022

Organized by



**Department of Mathematics**  
**Malaviya National Institute of Technology, Jaipur.**

**Coordinators**

**Dr. Om P. Suthar**  
**Dr. Kushal Sharma**  
**Dr. K. Palpandi**

## About MNIT Jaipur

Malaviya National Institute of Technology Jaipur is one of the premier NITs, designated with the status of "Institute of National Importance" through an act of parliament. The institute is fully funded by the Ministry of Education (Shiksha Mantralaya), Government of India. The institute was established in 1963, and its campus spreads over 325 acres of lush green area in the central location of Jaipur city. The institute offers undergraduate and postgraduate courses (B.Tech., M.Tech. /MBA / M.Sc. & Ph.D.) to about 4500 students, in leading fields of technology, architecture, & sciences. Through the engineering, management internationally renowned faculty, laboratories with state of art equipment and excellent infrastructure, the institute is actively engaged in research, consultancy and developmental activities, besides imparting regular teaching. MNIT Jaipur is ranked at 35th position in NIRF 2020 Ranking.

## DEPARTMENT OF MATHEMATICS

The Department of Mathematics was established in 1963. The Department was one of the two Departments, which were established along with the establishment of the college in Jaipur. The faculty members of the Department are teaching mathematics to about 1500 undergraduate and postgraduate students. The Department has produced more than 70 PhDs so far in various areas of Mathematics. The Department offers M.Sc. in Mathematics and also offers Ph.D. in varied areas like Analysis, Algebra, Special Functions, Integral Transform, Fractional Calculus, Operation Research, Topology, Computational Statistical methods and Fluid Dynamics.

## Organizing Committee

PATRON

**Prof. N.P. Padhy**

Director, MNIT Jaipur

Co-PATRON

**Dr. Vatsala Mathur**

Head, Department of Mathematics, MNIT Jaipur.

Coordinators

**Dr. Om P. Suthar | Dr. Kushal Sharma | Dr. K. Palpandi**

## RESOURCE PERSONS

The resource persons are from reputed institutes from India and abroad:

**Prof. PRADEEP G. SIDDHESHWAR**

CHRIST University, Bengaluru.

**Prof. O.D. MAKINDE**

Stellenbosch University, South Africa.

**Dr. RAM JIWARI**

Indian Institute of Technology, Roorkee.

**Dr. DHARMENDRA TRIPATHI**

National Institute of Technology, Uttarakhand.

**Dr. MAHESHA NARAYANA**

University of West Indies, Jamaica.

**DR. HARI VANSH RAI MITTAL**

Indian Institute of Technology, Palakkad.

**Dr. M. MALLIKARJUNAIAH**

Texas A&M University-Corpus Christi, Texas.

**Dr. R. SIVARAJ**

UAE University, UAE.

**Dr. GEETANJALI CHATTOPADHYAY**

Malaviya National Institute of Technology, Jaipur.

## REGISTRATION DETAILS

The registration fee (non-refundable) is as follows:

**UG/ PG Students: INR 500/-**

**Research Scholars, Faculty and Industry Participants: INR 1000/-**

**International Participants: USD 20**

**Mode of payment:**

The registration fee must be paid through online payment as per the following details:

**Account Name: Registrar (ICC) MNIT, Jaipur**

**Account Number: 676801081625**

**IFSC Code: ICIC0006768**

**Bank: ICICI Bank Ltd. MNIT Branch Jaipur**

Interested participants can register, on or before 04th June 2022, through Google form available at the following link :

**<https://forms.gle/oVinWSN67DkToeBL9>**

## IMPORTANT DATES

Last date for registration:

**04th of June, 2022**

Circulation of Workshop schedule etc.:

**05th of June, 2022**

Workshop Dates:

**06th of June to 10th of June, 2022**

