ABOUT KURUKSHETRA

Kurukshetra is a place of religious pilgrimage and historical significance. It is the land of Mahabharata and the place where sermons of "Bhagwad Gita" were delivered. In medieval period, Thanesar, the old city, was the seat of power of Harshwardhana. Kurukshetra is well connected with rail/road. It is a railway junction on Delhi-Ambala section and is situated on National Highway No. 1 (G.T. Road). It is approximately 160 km from Delhi and 100 km from Chandigarh. NIT Kurukshetra is about 10 km from Pipli and 6 km from Kurukshetra railway station.

ABOUT THE INSTITUTE

NIT Kurukshetra, formerly known as Regional Engineering College, Kurukshetra was founded in 1963. It was conferred upon the NIT status, with Deemed University on June 26, 2002.

The institute offers several courses, in various disciplines of B. Tech, M. Tech, MBA, MCA, and Ph. D. with an annual intake of about 1500 students. The institute also provides excellent facilities for advanced research in the emerging areas of Engineering, Science, and Technology. The institute has well-qualified and dedicated faculty along with supporting staff, laboratories, and other infrastructure. The infrastructure is geared to enable the institute to produce technical personnel of high quality.

ABOUT THE DEPARTMENT

The Department of Mathematics was established in 1963. It has grown from just four faculty members to fourteen at present. Many of the faculty members are actively contributing to research in areas such as Fluid Mechanics, Numerical Analysis, Fractional Differential Equations, Computational Fluid

Dynamics, Quantum Algebra, and Special Functions. The department offers an undergraduate programme (B.Tech.) in Mathematics and Computing, and a postgraduate programme (M.Sc.) in Mathematics. It also provides research opportunities through a doctoral (Ph.D.) programme. The department is equipped with a full-fledged computational laboratory to meet the academic and research needs of M.Sc. and B.Tech. students, research scholars, and faculty members.

Chief Patron
Prof. B.V. Ramana Reddy
Director, NIT Kurukshetra

Patron
Prof. A.S.V. Ravi Kanth
HoD, Department of Mathematics
NIT Kurukshetra

Conveners
Dr. Raghvendra Pratap Singh
Dr. Madduri Mani Harshita

IMPORTANT DATES

- Last Date of Registration: **May 22, 2025**
- Notification about selection: **May 23, 2025**
- Confirmation from Participants: **May 24, 2025**

REGISTRATION IS OPEN TO

- Faculty members from higher education institutions in Science and Engineering who are engaged in teaching and research in related areas.
- Research scholars and final year master's students aspiring for technical teaching and to continue research in related areas.
- Professionals from industry and R&D organizations who are involved in work related to Science and Engineering domains.

ANRF Sponsored Five-Day Workshop
on
Recent Advances in Scientific Computing (RASC) - 2025
MAY 26 - 30, 2025

Call for Registration and Participation

Organized by

DEPARTMENT OF MATHEMATICS
National Institute of Technology Kurukshetra
Kurukshetra-136 119
Haryana, India.

Sponsored By:

अनुसंधान नेशनल रिसर्च फाउंडेशन
Anusandhan National Research Foundation

OVERVIEW OF THE WORKSHOP

Scientific computing has become an essential tool for solving complex mathematical problems arising in various fields, including engineering, physics, biology, and finance. With recent advancements in numerical analysis, high-performance computing, and data-driven modelling, the role of mathematical techniques in computational sciences has expanded significantly. This five-day workshop on **"Recent Advances in Scientific Computing"** aims to bring together researchers, academicians, and students to explore cutting-edge developments in numerical methods, computational algorithms, and their real-world applications.

OBJECTIVE OF THE WORKSHOP

Participants will gain insights into the latest research trends and computational techniques, fostering collaborations among mathematicians and computational scientists. This workshop will provide a platform for knowledge exchange and skill enhancement, empowering attendees to tackle real-world mathematical challenges with advanced computational tools. Additionally, participants will stay updated with cutting-edge computational techniques, enhance their practical skills, and have the opportunity to interact with experts and researchers in the field. The workshop also aims to prepare them for advanced research and career opportunities in interdisciplinary areas.

CONTACT DETAILS

- Dr. Raghvendra Pratap Singh
  raghvendra@nitkkr.ac.in , 9651326616
- Dr. M M Harshita
  mmharshita@nitkkr.ac.in , 9441119593

TENTATIVE LIST OF RESOURCE PERSONS

Faculty members from IITs, NITs and centrally funded Institutes/Universities, will deliver lectures.

- Prof. S. Natesan, Department of Mathematics, IIT Guwahati
- Prof. Manoranjan Mishra, Department of Mathematics, IIT Ropar
- Prof. Subrahmanya Sastry Challa, Department of Mathematics and Department of Artificial Intelligence, IIT Hyderabad
- Prof. K. Sreenadh, Department of Mathematics, IIT Delhi

TOPICS IN THE WORKSHOP

- Numerical Analysis and Approximation Methods
- Singularly Perturbed Problems and Differential Equations
- High-Performance Computing and Parallel Algorithms
- Computational Fluid Dynamics and Engineering Applications
- Financial Mathematics and Computing
- Neural Networks and Machine Learning
- Finite difference and finite element methods

ORGANIZING COMMITTEE

- Prof. Param Ram, NIT Kurukshetra
- Dr. Sarasvati Yadav, NIT Kurukshetra
- Dr. Amit Prakash, NIT Kurukshetra
- Dr. Surender Ontela, NIT Kurukshetra

REGISTRATION FEES

- Research Scholar/Student Rs. 1000 +18% GST (1180).
- Faculty Rs. 2000 + 18% GST (2360).
- Industry/ R & D Rs. 4000 + 18% GST (4720).

Registration Fee includes registration kit, working lunch, tea / snacks on all the 5 days of the workshop. Accommodation inside the campus may be provided on payment basis subject to availability.

HOW TO APPLY

To generate the payment slip (which must be attached in the registration form), interested candidates should follow the following steps:

1. Click SBI Collect
2. Select Educational Institutions
3. Filter state to Haryana and search for DIRECTOR NIT KURUKSHETRA
4. Select payment category as RASC2025
5. Proceed (Fill in the requested details and complete the payment)
6. Generate the payment slip in .pdf or .JPEG format.

To apply for the workshop, interested candidates should fill out the registration form using the following link:

https://forms.gle/e7LzWKafhuzKtfhS6

You can also register by scanning the following QR code.