

About NIT Uttarakhand

National Institute of Technology Uttarakhand is amongst the 10 new NITs, located in the hilly terrain of Srinagar Garhwal on the banks of Alaknanda river. NIT Uttarakhand was established in 2009 under the Act of Parliament of India by the Ministry of Human Resource Development and designated with the status of "Institute of National Importance". The temporary campus of NIT Uttarakhand is functional from two campuses, i.e., the Polytechnic and the ITI campuses. The institute has made rapid growth in the recent past in terms of starting new academic programs, revision of academic curriculum, development of laboratories and infrastructure.

About the Department of Mathematics:

The Department of Mathematics offers U.G. courses and Ph.D. programmes. The faculty of the department conducts research in areas such as Summability and approximation theory, Mathematical modeling, Biofluids mechanics, Nanofluids, Energy storage, Bone mechanics, Pumping Flow Models Mathematical Biology, Computational Mechanics, Numerical Analysis, Fracture Mechanics, Smart Materials, Nonlinear Waves, Hyperbolic Systems of PDEs and other allied fields.

Objective of The Workshop:

The objective of this workshop is to provide an interactive platform to the participants (young researchers and Ph.D./M.Tech students) to learn new concepts and techniques pertaining to ODEs, PDEs and Integral equations in the engineering context. It is also our intention to make the researchers aware of current challenges, opportunities and openings in the changed context of today's world.

Theme of the Workshop:

The workshop on "ODEs, PDEs, and Integral Equations: Their Engineering Context" focuses on the following areas:

- « Ordinary Differential Equations (ODEs) in the context of Engineering Applications.
- « Partial Differential Equations (PDEs) in the context of Engineering Applications.
- « Integral Equations in the context of Engineering Applications.

Topics to be covered:

- « The Engineering Contexts of Initial and Boundary Value Problems of ODEs and PDEs
- « Consistency and Stability of Splitting Methods.
- « Some Numerical Methods for BVPS and Integral Equations
- « Numerical Methods for Hyperbolic Conservation Laws
- « Wave Equation In One And More Space Dimensions
- « Numerical Treatment of Functional Differential Equation
- « Double-Diffusive Convective Instability in Porous Media Flows
- « On Quasi-Static Crack Propagation in Nonlinear Strain-Limiting Elastic Solids: Phase-Field Regularization and Finite Element Discretization
- « Far Field Boundary Conditions and their Approximation
- « High-Order Orthogonal Spline Collocation Methods For Two-Point Boundary Value Problems With Interfaces
- « Integral Equation Methods for Problems in Fluid Mechanics

TEQIP-III
(Technical Education Quality Improvement Programme-III)

Sponsored

One Week Workshop

on

ODEs, PDEs, and

Integral Equations:

Their Engineering Context

(Through Online Mode)

(September 21-26, 2020)

Organized by



Department of Mathematics

National Institute of Technology Uttarakhand, India

REGISTRATION

Registration Fee: There is limited number of seats. Selection will be done on first come first serve basis. It is therefore advised that the candidates should get registration done as soon as possible. There is no registration fee for the participants of TEQIP-III Institutions. Rs. 250/- will be charged as registration fee (Non-Refundable) for the participants of Non TEQIP-III Institutions.

Bank Details

Account Name: NIT, Uttarakhand

Name of the Bank: State Bank of India

A/c Number: 37843015175

Bank Address: Srinagar, Distt- Pauri Garhwal
Uttarakhand

IFSC Code: SBIN0003181

To participate in the workshop, fill the Google form via following link:

https://docs.google.com/forms/d/e/1FAIpQLSfvxo2vXghJnthx23i5ieeZOW6BE4eaLX1cIKR9tkME5hW_oQ/viewform?usp=sf_link

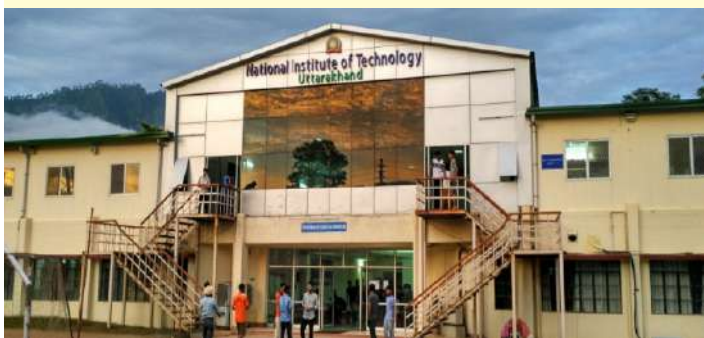
Last date of Registration is 19th September, 2020. E-Certificate will be issued to the participants after successful completion of the Course.

CONTACT

Dr Kuldeep Sharma +91-9456318765

Dr. D.B. Singh +91-9450924373

Dr. Kusum Sharma +91-9413025701



RESOURCE PERSONS



Prof. Pradeep G. Siddheshwar
Christ
(Deemed to be University)



Prof. G. P. Raja Shekhar
IIT, Kharagpur



Prof. G D Veerappa Gowda
TIFR-CAM, Bengaluru



Dr. S. M. Mallikarjunaiah
Texas A&M University-
Corpus Christi, Texas, USA



Prof. A. S. Vasudeva Murthy
TIFR-CAM, Bengaluru



Prof. P V S N Murthy
IIT Kanpur



Dr. P. Danumjaya
BITS Pilani, Goa Campus



Prof. B.V. Rathish Kumar
IIT Kanpur



Prof. Reddy Y.N.
NIT Warangal



Prof. P S Datti
TIFR-CAM, Bengaluru

ORGANIZING COMMITTEE



Patron
Prof. Shyam Lal Soni
Director, NIT Uttarakhand

Conveners



Dr. Nitin Sharma



Dr. Dharmendra Tripathi

Coordinators



Dr. Kuldeep Sharma



Dr. Dheerendra B. Singh



Dr. Kusum Sharma