



## Objective & Scope

The course gives the insight about the importance of digital tools and how it will be useful in writing and reviewing manuscripts.

## Speakers (Tentative)

- 1) Prof. Ganapati Panda, Former Dy. Director & Prof. Emeritus, IIT Bhubaneswar,
- 2) Dr. Nithin V. George, Associate Professor, IIT Gandhinagar,
- 3) Dr. Pyari M. Pradhan, Assistant Professor, IIT Roorkee,
- 4) Dr. Sitanshu Sekhar Sahu, Assistant Professor, BIT Mesra,
- 5) Dr. Jagdish Chand Bansal, Associate Professor, South Asian University, New Delhi,
- 6) Dr. Sriparna Saha, Associate Professor, IIT Patna,
- 7) Dr. Prashant K. Jain, IIITDMJ Jabalpur,
- 8) Prof. Rajesh Kumar, MNIT Jaipur,
- 9) Dr. S. J. Nanda, MNIT Jaipur.

## Key Features

- Online / Live lectures sessions by subject experts.
- Comprehensive tutorials and practice notes.
- Online lab and training sessions.
- Follow up sessions and discussion forums on research problems and internships.

Last Date for registration: August 31, 2021

## Joint-Principal Coordinators

1. Dr. Jyoti Prakash Singh, (jps@nitp.ac.in), CSED, NITP
2. Dr. Rakesh Ranjan, (rr@nitp.ac.in), ECED, NITP

## Course Contents

- Fundamental of Optimization, Unconstrained and Constrained Optimization, Symmetric Dual Problems, Derivative based Optimization, etc.
- Nature Inspired Optimization, Multi-modal function Optimization, Evolutionary Computation (Genetic algorithm, Differential Evolution, etc.)
- Swarm Intelligence (Particle Swarm Optimization, Ant Colony Optimization, etc.), Bio-Inspired Optimization, Physical Algorithms, etc.
- Multi-objective Optimization, Non-dominated Solutions, Non-dominated Sorted Genetic Algorithm (NSGA-II), Multi objective Particle Swarm Optimization, etc.
- Applications - Benchmark mathematical function optimization, Linear and Nonlinear System Identification, Dynamic System Identification, Communication Channel Equalization, Device Modeling, Data Classification and Clustering, Hybridization of optimization techniques with Neural Networks and Deep Neural Networks, etc.

## Course Fee Details

Academic (student/faculty): 500 INR  
Industry People/Others: 1000 INR  
Foreign Participants: 4000 INR

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Online payment details:  
Bank Name: Indian Bank (Earlier Allahabad Bank)  
Account Name: NIT Patna  
Account No.: 50380476798  
IFSC Code: IDIB000B810

Link for registration: <https://forms.gle/uykaR2sd383dXJrk7>

For more details and application form visit:

<http://www.nitp.ac.in/ict/index.php>

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