

EICT Academies Global Online FDP on Advanced Optimization Techniques using MATLAB (Date :17th to 28th February 2025)

Date	Session I (4PM-5PM)		Session II (5.10PM-6.10PM)	Session III (6.20PM-7.20PM)	Session IV(7.30PM-8.30PM)
17-02-2025 (Monday)	3.30PM-4.00 PM	4.00PM-5.00PM	Module II : Prof. B. K. Panigrahi	Module I : Prof. Ratnajit Bhattacharjee	
	Inauguration	Module I : Prof. G. Panda Introduction to Optimization Algorithms	Particle Swarm Optimization & Its Variants	Fundamentals of Classical Optimization Techniques	
18-02-2025 (Tuesday)	Module II : Prof. G. Panda Ant Colony Optimization		Module I : Dr. Anil Kumar Linear Optimization in Multi-rate Signal Processing	Lab I : Dr. S. J. Nanda MATLAB implementation Least Mean Square Optimization Algo.	
	19-02-2025 (Wednesday)	Module I : Dr. Ajit Ku. Sahoo Alternating direction multiplier method (ADMM) for optimization	Module II : Prof. Kusum Deep Genetic Algorithm	Module II : Dr. S. J. Nanda SSO Algorithm for Hyperspectral Image Analysis	
20-02-2025 (Thursday)		Module II : Prof. Rajesh Kumar Differential Evolution (DE) and its variants	Module II : Prof. Kusum Deep Real Life Applications of Genetic Algorithm	Module II : Dr. J. C. Bansal Artificial Bee Colony	
	21-02-2025 (Friday)	Module II : Prof. Rajesh Kumar Design of Metaheuristic Algorithms	Module II : Dr. Arnapurna Panda Colliding Bodies Optimization & Symbiotic Organism Search	Module II : Dr. J. C. Bansal An Introduction to Drone Swarm	
22-02-2025 (Saturday)		Module III : Prof. B. K. Panigrahi Introduction to Multi Objective Optimization (MOO)	Module III : Prof. Swagatam Das Statistical tests for single and multi objective optimization	Module II : Dr. Gunjan Soni Simulated Annealing and Tabu Search	
	23-02-2025 (Sunday)	Module III : Dr. Sriparna Saha MOO application in Data Clustering	Module IV : Dr. Ila Sharma Optimization Algorithms in Filter Designing	Module IV : Dr. Ashish Sharma Application to Seismic Signal Processing	
24-02-2025 (Monday)		Module IV : Prof. N. P. Padhy Application of Optimization Techniques to Electrical Engg. Problems	Module III : Dr. Sriparna Saha MOO for Natural Language Processing	Module III : Dr. P. M. Pradhan MOO for Cognitive Radio & Sensor Network	
	25-02-2025 (Tuesday)	Module III : Dr. Abhishek Gupta Transfer and Multi Task Optimization	Module III : Dr. P. M. Pradhan Adaptive Filtering using Divergence Criterion	Lab V : Dr. Ila Sharma NSGA-II programing with MATLAB	
26-02-2025 (Wednesday)		Module IV : Prof. N. V. George Nonlinear System Identification	Module III : Dr. Rachana Gupta Many Objective optimization	Lab VI : Dr. S. J. Nanda NSGA-III programing in MATLAB	
	27-02-2025 (Thursday)	Module IV : Prof. N. V. George Appln. to Audio Signal Processing	Module IV : Dr. Sitanshu S. Sahu Appln. to Bio-medical Informatics	Module IV : Dr. Deepak Ranjan Nayak Application to Image Processing	
28-02-2025 (Friday)		Module IV : Dr. Anupam Trivedi UDE-III, Winner Algorithm of Real Parameter Constraint Optimization	Module III : Prof. Swagatam Das Dynamic & Constrained Optimization	Module IV : Dr. Vasundhara Application to Hearing Aid Design	Quiz-2 Feedback and Validation

Speaker Details :

- 1) Prof. Narayana Prasad Padhy, Director MNIT Jaipur and Director IIIT Kota, Dept. of Electrical Engineering, IIT Roorkee
- 2) Prof. Ganapati Panda, Fellow INAE, Research Advisor C. V. Raman Golbal Univ., Odisha, Former Dy. Director IIT Bhubaneswar
- 3) Prof. Bijaya Ketan Panigrahi, Fellow IEEE, Dept. of Electrical Engineering, IIT Delhi
- 4) Prof. Kusum Deep, Professor Emeritus, Dept. of Mathematics, IIT Roorkee
- 5) Prof. Ratnajit Bhattacharjee, Dept. of Electronics and Electrical Engineering , IIT Guwahati (Coordinator)
- 6) Prof. Nithin V. George, Dept. of Electrical Engineering, IIT Gandhinagar
- 7) Prof. Swagatam Das, Electronics and Communication Sciences Unit, ISI Kolkata
- 8) Prof. Rajesh Kumar, Dept. of Electrical Engg., MNIT Jaipur and Dept. of Health Science, Univ. of Johannesburg, South Africa
- 9) Dr. Pyari M. Pradhan, Dept. of Electronics and Communication Engg., IIT Roorkee
- 10) Dr. Sriparna Saha, Dept. of Computer Science and Engineering, IIT Patna
- 11) Dr. Abhishek Gupta, Ramanujan Fellow, Mechanical Engineering, IIT Goa
- 12) Dr. Anupam Trivedi, Senior Research Scientist, Dept. of Electrical & Computer Engineering, National University of Singapore
- 13) Dr. Jagdish Chand Bansal, Dept. of Mathematics, South Asian University, New Delhi
- 14) Dr. Ajit Ku. Sahoo, Dept. of Electronics and Communication Engg., NIT Rourkela
- 15) Dr. Vasundhara, Dept. of Electronics and Communication Engg., NIT Warangal
- 16) Dr. Anil Kumar, Dept. of Electronics and Communication Engg., IIITDM Jabalpur
- 17) Dr. Dinesh Kumar Kotary, Dept. of Electronics and Communication Engg., IIIT Ranchi
- 18) Dr. Sitanshu Sekhar Sahu, Dept. of Electronics and Communication Engg., Birla Institute of Technology, Mesra
- 19) Dr. Arnapurna Panda, Centre of Data Sciences, Siksha 'O' Anusandhan University, Bhubaneswar
- 20) Dr. Rahul Kumar Vijay, Dept. of Computer Science, Banasthali Vidyapith
- 21) Dr. Ashish Sharma, Dept. of Electronics and Communication Engg., Manipal Academy of Higher Education, Bengaluru
- 22) Dr. Rachana Gupta, Data Scientist, Rishabh Software, Vadodara
- 23) Dr. Gunjan Soni, Dept. of Mechanical Engg., MNIT Jaipur
- 24) Dr. Deepak Ranjan Nayak, Dept. of Computer Science and Engg., MNIT Jaipur
- 25) Dr. Ila Sharma, Dept. of Electronics and Communication Engg., MNIT Jaipur (Coordinator)
- 26) Dr. Satyasai Jagannath Nanda, Dept. of Electronics and Communication Engg., MNIT Jaipur (Coordinator)