



## FACULTY DEVELOPMENT PROGRAMME (FDP) ON OPTIMIZATION TECHNIQUES FOR ENGINEERING APPLICATIONS

(7<sup>th</sup>-15<sup>th</sup> April 2021)

Organized by

E & ICT Academy, NIT Warangal

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

### Preamble:

“Electronics & ICT Academy” was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy role is to offer faculty development programmes (FDPs) in standardized courses and emerging areas of Electronics, Information Communication Technologies, training and consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

This FDP is devoted to address the need to enhance the knowledge about the latest development pertaining to **Optimization Techniques for Engineering Applications** is being conducted at **National Institute of Technology, Warangal**. The whole course is handled by academicians and industry experts.

### Major Course Contents:

- Direct Search Methods, Gradient Based methods
- Simplex Method and Linear Programming
- Integer Linear Programming
- Genetic Algorithm
- Particle Swarm Optimization
- Differential Evolution
- Ant Colony Optimization Algorithm
- Simulated Annealing Algorithm
- Jaya Algorithm
- Teaching Learning Based Optimization Algorithm
- Rao Algorithms
- Single Variable Optimization Methods
- Multi-Variable Optimization Methods
- Constrained Optimization Methods
- Multi-Criteria Decision-Making Methods
- Neural Network and its Applications
- Fuzzy Logic
- Hybrid Intelligent Systems
- Case Studies on Soft Computing and Meta-Heuristic Optimization Algorithms in Engineering Applications

### Faculty conducting this programme:

The programme will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IIITs/Abroad are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

### Eligibility:

The program is open to the Faculty of Engineering Colleges, MCA Colleges and other allied disciplines in India. Industry personnel working in the concerned /allied discipline can also attend.

### Registration Fee Particulars:

Faculty and Research Scholars	Rs.750/-
Industry Participants	Rs.2250/-

Participants need to pay the Registration Fee Online using the following details

Online Transfer Details
Account Name: Electronics & ICT Academy NITW
Account No: 62423775910
IFSC: SBIN0020149

### How to apply:

Participants are required to fill the online registration form by clicking on the following link:

<https://forms.gle/Lf93uv8ZyNAQFpt7A>

### Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 100 (hundred). The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD/online payment will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

### Important dates:

Last date for submission of Application	02/04/2021 (11:59 PM)
Selection List by E- mail	05/04/2021 (11:59 PM)
Duration	07/04/2021 (Wednesday) to 15/04/2021 (Thursday)

### About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech. degrees in various branches of engineering, M.Tech. and Ph.D. programs in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

The Department of **Computer Science and Engineering (CSE)** offers B.Tech course in CSE, M.Tech courses in CSE, Computer Science and Information Security (CSIS) and Master of Computer Applications (MCA). The Department has experienced faculty with good publications and well-established laboratories. The Department has liaison with reputed industries and R&D organizations like Microsoft, IBM, Oracle, Accenture, Infosys, TCS, EMC 2 , C-DAC, Motorola, NIC, Sun Micro Systems, SPSS and tie up with IISc in certain areas. Department conducts various sponsored programmes throughout the year.



**FACULTY DEVELOPMENT PROGRAMME (FDP)**  
**ON**  
**OPTIMIZATION TECHNIQUES FOR ENGINEERING APPLICATIONS**  
**(7<sup>th</sup>–15<sup>th</sup> April 2021)**  
**Organized by**  
**E & ICT Academy, NIT Warangal**

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

**SPONSORSHIP CERTIFICATE**

1. Name :  
2. Designation :  
3. Institution :  
4. Email :  
5. Reference No:      Bank:              Date:

Dr. /Mr. /Ms. .... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on “**Optimization Techniques for Engineering Applications**”, sponsored by Electronics & ICT Academy during 7<sup>th</sup>–15<sup>th</sup> April, 2021 at NIT Warangal.

Amount:

Signature of Head of Institution  
(with seal)

6. Address for Correspondence:

Interested faculty members, please fill the following  
Google form:

7. Educational Qualification:  
8. Subjects taught so far:

<https://forms.gle/Lf93uv8ZyNAQFpt7A>

**Address for correspondence**  
*Post your application form*

9. No. of refresher courses/workshops attended:  
10. Experience (in years):  
Teaching:      Research:      Industry:

**Dr. Manjubala Bisi**  
**Assistant Professor**  
**Dept. of CSE**  
**National Institute of Technology**  
**Warangal – 506004**  
**Telangana, India**

11. Accommodation required:      YES /NO  
12. Do you belong to SC/ST :      YES /NO

*For more details about Electronics & ICT Academy, NIT, Warangal, please visit: <https://nitw.ac.in/eict>*

**Declaration**

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

*For more enquiries please contact:  
Dr. Manjubala Bisi / Dr. Sanjaya Kumar Panda  
Mobile: +91-9502940360 / +91-7978685893*

Signature of the Applicant

---

**Coordinators**

**Dr. Manjubala Bisi / Dr. Sanjaya Kumar Panda**  
Dept. of Computer Science and Engineering  
NIT Warangal—506 004  
Email: manjubalabisi@nitw.ac.in, sanjaya@nitw.ac.in