



***A Five-Day Online Faculty
Development Programme (FDP)
on***

***Emerging Trends in Artificial
Intelligence Methods to Power
Systems, Signal Processing and
Control***

(EAIPSSC-2020)

2 - 6 November, 2020

Organized by

***Department of Electrical Engineering
National Institute of Technology Andhra Pradesh
Tadepalligudem, Andhra Pradesh-534101, India.***

Supported by

***IEEE Vizag Bay section
IEEE PELS/IAS/PES Joint Chapter***



CHIEF PATRON

Prof. C. S. P. Rao
Director, NIT Andhra Pradesh

CO-PATRONS

Dr. Dinesh P. Sankar Reddy
In-charge Registrar
NIT Andhra Pradesh

Dr. S. Lakshminarayana
Chair, IEEE Vizag Bay Section

Dr. V. Sandeep
Head, Electrical Engineering
NIT Andhra Pradesh

COORDINATORS

Dr. Kiran Teeparthi
Asst. Prof., EED

Dr. Sri Phani Krishna Karri
Asst. Prof., EED

IMPORTANT DATES:

- Last date for submission of registration form: 28th October, 2020 (5:00 PM) or until the maximum intake (as determined by NIT Andhra Pradesh) is met, whichever happens earlier.
- Intimation of selection will be through e-mail.

ABOUT THE INSTITUTE

National Institute of Technology Andhra Pradesh is the 31st institution among the chain of NITs started by the Government of India. NIT Andhra Pradesh was established in the state of Andhra Pradesh in the year 2015. With the support of MHRD and an active role of the director, Prof. C.S. P. Rao, the institute started functioning in its permanent campus which is widely distributed in 178 acres. NIT Andhra permanent campus is a wifi enabled residential campus with academic and laboratory complexes. Rest of the buildings are under construction or in the finishing stage. Presently, the institute offers B.Tech, M.Tech, M.S (by research) and Ph.D. programs. The main goal of this institution is to promote an excellence in teaching, research, and innovation through quality education and thereby to serve the society.

ABOUT THE DEPARTMENT

The department is one of the pioneering departments of the Institute. The department is progressing at a rapid pace with development in both the spheres of infrastructure facilities and academic programmes. The department has highly qualified faculty members engaged in teaching and research with the aim of achieving excellence in the field of Electrical Engineering. The department offers UG course in Electrical Engineering and a PG programme in Power Electronics & Drives. The department is offering Ph.D. programme to promote research activities in the various areas of Electrical Engineering. The consultancy and testing services are also rendered by the department.

ABOUT THE PROGRAMME

Industry 4.0 demands skill set to device Artificial intelligence (AI) based solutions. The program is aimed to equip the attendees with basic understanding of AI trends and AI based frameworks which have established state-of-the-art performance in various fields of electrical engineering. The fields for current program are limited to power systems, signal processing and control system. The resource persons of the program are indulged in wide spectrum of research ranging from academia to industry. This practice will expose the audience with practices of academia and industry including the enriched insights of the algorithms. This programme endeavours to provide conceptual clarity to popular techniques in optimization, machine learning, deep learning, etc.

COURSE OBJECTIVES

- Artificial intelligence foundations
- Optimization algorithms
- Data-driven tools to enable power grid resiliency
- Optimal planning of active distribution networks using multi-objective optimization algorithms.
- AI/ML aspects of smart grid from Generation to Utilization
- Deep learning architectures for image processing
- To model nonlinear PID controllers and their tuning using optimization algorithms.
- AI techniques in guidance & control for missile system design

WHO CAN ATTEND?

Faculty members/ research scholars/ students from academic institutes approved by the AICTE/ UGC/ MHRD and Scientists/ Engineers working in Private/ Public/ Govt. organizations/ industries etc. can attend the course.

HOW TO APPLY

Participant's category	Registration fee*
Research Scholars/PG Students	Rs. 200/-
Faculty/ Industry/ R&D / Govt. Organization	Rs. 300/-

Fee needs to be paid only after getting the confirmation e-mail from the FDP coordinator. The fee is non-refundable. The interested candidate should register by filling the google form at following link:

<https://forms.gle/qp3Dj3peggT4kcRLA>

SELECTION CRITERIA & CERTIFICATE ISSUANCE

Selection will be done on a first-come-first-serve basis. E-certificates will be issued to the participants who attend all the sessions.

ADDRESS FOR CORRESPONDENCE

Dr. Kiran Teeparthi

Assistant Professor, EED
Mobile No: +91 9533938371
E-mail: kiran.t39@nitandhra.ac.in

Dr. Sri Phani Krishna Karri

Assistant Professor, EED
Mobile No: +919490863735
E-mail: sriphani@nitandhra.ac.in

RESOURCE PERSONS

1. **Prof. D. M. Vinod Kumar**, Ph.D. (IITK)
Professor (HAG) in Dept. of Electrical Engineering at NIT Warangal.
2. **Dr. Balakrishna. P**, Ph.D. (IITM)
Senior Lead R&D Engineer in Smart Grid domain GE Grid Solutions, Hyd Technology Center.
3. **Prof. Surender Reddy S.**, Ph.D. (IITD)
Associate Professor, Dept. of Railroad and Electrical Engineering, Woosong University, Daejeon, Republic of Korea.

4. **Dr. Sahana Prabhu**, Ph.D. (IITM)
Research Scientist and Technical Architect at Robert Bosch Engineering and Business Solutions Private Limited.
5. **Mr. Srikanth Srivastava**
Scientist, Defence Research and Development Laboratory (DRDL), HYD.
6. **Dr. P. Sankar**, Ph.D. (NITT)
Assistant Professor, EED, NIT Andhra Pradesh.
7. **Dr. M. Venkateswara Reddy**, Ph.D. (IITR)
Research Associate, Electrical Engineering and Computer Science, Washington State University, Pullman, USA.
8. **Dr. Pannala Sabjeev**, Ph.D. (IITR)
Research Associate, Electrical Engineering and Computer Science, Washington State University, Pullman, USA.
9. **Dr. S Kayalvizhi**, Ph.D. (NITW)
Assistant Professor, EED, NIT Tiruchirappalli
10. **Dr. Arun Kumar NM**, Ph.D. (IITKgp)
Assistant Professor, EED, NIT Calicut.



NIT Andhra Pradesh, Tadepalligudem Awarded Platinum Rating by the Indian Green Building Council (IGBC)