CHIEF PATRONS

Sri. D.J. Bharat Reddy
General Secretary, ANES

Sri. K. Niranjan Kumar
CEO, ANES

PATRON

Prof. K. Sri Rama Krishna
Principal, ANITS

COORDINATOR

Dr. J. Vijaya Kumar
Professor & Head
Department of EEE, ANITS
Mobile: 9290852689
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REGISTRATION DETAILS

Participants are requested to register through the link **https://www.aicte-india.org/atal** only. Participants are abiding by the rules and regulations governing the AICTE sponsored FDP.

*No Registration Fee

INSTRUCTIONS TO THE PARTICIPANTS

- **The FDP is of two weeks: first week, online for theory; and second week, offline for practical/ labs/ experiential learning**.

- **Program Attendance of 80% is compulsory and scoring of 70% and above marks in test conducted at the end of the FDP is only eligible for obtaining the Certificate**.

- Participants shall bear the cost of travelling and boarding/lodging if he/she wishes to attend ATAL FDP. However, refreshment & lunch would be provided for free. Based on merit 20 participants receive a book as a reward.

ABOUT ANITS

Anil Neerukonda Institute of Technology & Sciences (ANITS) Visakhapatnam is owned by **Megha Engineering and Infrastructure Limited (MEIL)** which is one of the top infrastructure and manufacturing company in India with headquarters at Hyderabad. The institute was established in the academic year 2001-02 by **Anil Neerukonda Educational Society (ANES)** which was founded by Dr. N.B.R. Prasad, an NRI Philanthropist from USA, with industrialists and eminent educationalists in memory of Late Anil Neerukonda, S/o. Dr. N.B.R. Prasad. Its humble journey started in 2001 with an intake of 220 students into four undergraduate B.Tech programs. Within 14 years of its establishment, the institute has registered phenomenal growth and has been accredited by NAAC and by NBA. **ANITS is recognized as the Host Institute (HI) for implementation of the incubation component under MSME Innovation Scheme (MSME Champion Scheme) and attained NIRF Rank in the band of 251-300 for the year 2022.** It has been accorded the status of **"Centre for Research"** for guiding Ph.D. scholars and permanently affiliated to Andhra University. It has achieved autonomous status in 2015. Further, the institute has been currently ranked as 4th among the private engineering colleges in A.P by APSCHE. It has also been recognized as **"Centre for Excellence"** by Infosys. Today, the institute offers nine B.Tech programme and four M.Tech programme with an annual intake of about 1100 students.

ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering (EEE) was started in the year 2001-02 with an intake of 40 students and presently with an intake of 150 students. The UG program in EEE department was accredited by NBA in 2008 and was re-accredited in the year 2013 and 2016 respectively. In 2021 it was accredited by NBA under Teir-1. A PG course with CONTROL SYSTEMS specialization is also being offered by the department with an intake of 18. The department was recognized as a **Research Centre** to provide guidance to full time / part-time Ph.D. scholars. Presently 14 scholars are pursuing Ph.D in the areas of PS, PE & CS.

A Two Week
Faculty Development Program
On
"Artificial Intelligence Techniques in Smart Grid enabled Restructured Power System - Practical Applications".
07-11-2022 to 12-11-2022 (Online)
14-11-2022 to 18-11-2022 (Offline)

Coordinator
Dr. J. Vijaya Kumar, Professor &Head
Department of EEE, ANITS

Co-Coordinator
Mr. S. Harish, Asst. Professor
Department of EEE, ANITS

Sponsored by
AICTE-ATAL, New Delhi

Organized by
Department of Electrical & Electronics Engineering
Anil Neerukonda Institute of Technology & Sciences
(Autonomous, Accredited by NBA &NAAC, Permanently affiliated to AU)
Sangivalasa-531162, Bheemunipatnam,
Visakhapatnam Dist. A.P, India.

ABOUT ATAL

All India Council for Technical Education (AICTE) Training and Learning (ATAL) Academy is established with the vision "To empower faculty to achieve goals of Higher Education such as access, equity and quality". AICTE is committed for development of quality technical education in the country by various technical schemes launched by Ministry of Human Resource Development, Govt. of India.

ABOUT FDP

Governments and companies invest billions of dollars in technologies to convert, harvest, rising demand, changing demand and supply patterns, efficiency, lack of analytics required for optimal energy planning, and store energy.

In this scenario, artificial intelligence (AI) is starting to play a major role in the energy market. Recognizing the importance of AI, this study was conducted on seven different energetics systems and their variety of applications, including: i) electricity production; ii) power delivery; iii) electric distribution networks; iv) energy storage; v) energy saving, new energy materials, and devices; vi) energy efficiency and nanotechnology; and vii) energy policy, and economics.

The main drivers are the four key techniques used in current AI technologies, including: i) fuzzy logic systems; ii) artificial neural networks; iii) genetic algorithms; and iv) expert systems.

In developed countries, the power industry has started using AI to connect with smart meters, smart grids, and the Internet of Things devices. These AI technologies will lead to the improvement of efficiency, energy management, transparency, and the usage of renewable energies.

This program offers a wide and comprehensive practical based approach with the applications of AI to address the challenges and opportunities of smart grid enabled restructured power system.

COURSE CONTENT

- Intelligent electric power equipment (PMUs & RTUs)
- Big-data-based intelligent prediction and assistant decision-making.
- AI based power management and consumption, smart grid and renewable energy systems.
- A practical application and implementation of adaptive techniques using neural networks in auto reclose protection system control.
- Intelligent optimization and its application in power system planning, market trade, and dispatch
- Application of artificial intelligence in power system security and stability.
- ES-Based Automated Design, Simulation, and Controller Tuning of Wind Generation System.
- Hands-on-training using Simulation Software's. (Power World, PSCAD & ETAP)

ORGANISING COMMITTEE

Dr. G. Raja Rao	Mrs. D. Sri Lakshmi
Dr. V. Murali	Mrs. V. Rangavalli
Dr. S Balamurali	Mr. N. Kiran
Dr. V Bhaskar Somu	Mr.J UdayVenkatesh
Mr. K Kiran Kumar	Mr. RVNL Divakar
Mr. B. Rajasekhar	Mrs. T.V. Subhashini
Dr. R. Satish	Mr.T.Subrahmanyam
Mrs. K. Lavanya	Mr. S.J.V. Prakash
Dr. Ch. V. N. Raja	Mr.B. Satyanarayana
Mr. M.Sudheer Kumar	Dr. L. Phani Raghav
Mr. K. Trinadh Babu	Dr. T. Narasimhulu
Mr. A. D. Apparao	Dr. D. Rajesh
Mr. L. Vijay	Dr. M. Dhananjaya

RESOURSE PERSONS

- Prof. D. Das, IIT Kharagpur
- Prof. D. M. Viond Kumar, NIT Warangal
- Dr. S. Surendra Reddy, Woosong University, South Korea
- Dr. V. Vignesh, IIT Tirupati
- Dr. B. Venugopal Reddy, NIT Goa.
- Dr. Altaf Q H Badar, NIT Warangal
- Dr. Md. Nabab Alam, NIT Warangal
- Dr. Deepak R. P, NIT Warangal.
- Dr. M. Biswal, NIT Raipur
- Mr. T. Srimannarayana, EE, SLDC, A.P
- Mr. R. Santosh, ADE, SLDC, A.P
- Prof. K. Rama Sudha, Andhra University, A.P
- Prof. K. Srikumar, JNTU Vizianagaram, A.P
- Prof. P. Bharani Chandra Kumar, GITAM University, Visakhapatnam, A.P

WHO CAN PARTICIPATE?

- Faculty members of the AICTE approved institutions, Research scholars, PG Scholars and Participants from Government/Industry/Professionals.
- Maximum 50 participants are allowed to attend blended FDP with in 100 km of host institute.
- Selection criteria for the participants are first come first serve basis. 10% reserved for host institute.

IMPORTANT DATES

Last date of registration: 5th November 2022
Intimation of selection: 6th November 2022
Program dates: 7th -18th November 2022

Program Schedule

Week 1-Online (07:00 PM – 09:30 PM)

Day 1 (07-11-2022)	Day 2 (08-11-2022)	Day 3 (09-11-2022)	Day 4 (10-11-2022)	Day 5 (11-11-2022)	Day 6 (12-11-2022)
7:00 PM - 7:50 PM **SESSION 1 (I)** by Prof. D. Das, IIT Kharagpur	**7:00 PM - 7:50 PM** **SESSION 2 (I)** by Dr. M. Biswal, NIT Raipur	**7:00 PM - 7:50 PM** **SESSION 3 (I)** by Dr. Deepak R P, NIT Warangal	**7:00 PM - 7:50 PM** **SESSION 4 (I)** by Dr. B. Venugopal Reddy NIT Goa	**7:00 PM - 7:50 PM** **SESSION 5 (I)** by Dr. S. Surendra Reddy Woosong University South Korea	**7:00 PM - 7:50 PM** **SESSION 6 (I)** by Dr. Md. Nabab Alam NIT Warangal
8:00 PM - 8:50 PM **SESSION 1 (II)** by Prof. D. Das, IIT Kharagpur	**8:00 PM - 8:50 PM** **SESSION 2 (II)** by Dr. M. Biswal, NIT Raipur	**8:00 PM - 8:50 PM** **SESSION 3 (II)** by Dr. Deepak R P, NIT Warangal	**8:00 PM - 8:50 PM** **SESSION 4 (II)** by Dr. B. Venugopal Reddy, NIT Goa	**8:00 PM - 8:50 PM** **SESSION 5 (II)** by Dr. S. Surendra Reddy Woosong University South Korea	**8:00 PM - 8:50 PM** **SESSION 6 (II)** by Dr. Md. Nabab Alam NIT Warangal
9:00 PM - 9:30 PM Session 1 Interactions	**9:00 PM - 9:30 PM** Session 2 Interactions	**9:00 PM - 9:30 PM** Session 3 Interactions	**9:00 PM - 9:30 PM** Session 4 Interactions	**9:00 PM - 9:30 PM** Session 5 Interactions	**9:00 PM - 9:30 PM** Week 1 MCQs

Week 2-Offline (9:30 AM – 4:30 PM)

Day 1 (14-11-2022)	Day 2 (15-11-2022)	Day 3 (16-11-2022)	Day 4 (17-11-2022)	Day 5 (18-11-2022)
9:00 AM - 9:30 AM Inauguration	**9:30 AM - 12:00 N** **SESSION 8** by Mr. T. Srimannarayana, EE, SLDC, A.P	**9:30 AM - 12:00 N** **SESSION 10** by Prof. D. M. Vinod Kumar, NIT Warangal	**9:30 AM - 12:00 N** **SESSION 12** by Prof. K. Rama Sudha, Andhra University Visakhapatnam, AP	**9:30 AM - 12:00 N** **SESSION 14** by Prof. P. Bharani Chandra Kumar, GITAM University, Visakhapatnam, A.P
9:30 AM - 12:00 N **SESSION 7** by Dr. V. Vignesh, IIT Tirupati	**12:00 N - 1:00 PM** Article-1 Discussion	**12:00 N - 1:00 PM** Article-2 Discussion	**12:00 N - 1:00 PM** MCQs	**12:00 N - 1:00 PM** Visit Report (Team)
12:00 N - 1:00 PM Lunch	**1:00 PM - 2:00 PM** Lunch	**1:00 PM - 2:00 PM** Lunch	**1:00 PM - 2:00 PM** Lunch	**1:00 PM - 2:00 PM** Lunch
1:00 PM - 2:00 PM Field Visit	**2:00 PM - 4:30 PM** **SESSION 9** by Mr. R. Santosh, ADE, SLDC, A.P	**2:00 PM - 4:30 PM** **SESSION 11** by Dr. Altaf Q H Badar, NIT Warangal	**2:00 PM - 4:30 PM** **SESSION 13** by Prof. K. Srikumar JNTU Vizianagaram, A.P	**2:00 PM - 3:00 PM** Reflection Journal
2:00 PM - 4:00 PM Field Visit	**4:30 PM - 5:00 PM** Practical Session	**4:30 PM - 5:00 PM** Practical Session	**4:30 PM - 5:00 PM** Practical Session	**3:00 PM - 4:00 PM** Feedback
4:00 PM - 5:00 PM Travel back				**4:00 PM - 5:00 PM** Valedictory