

Organizing Committee

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MMMUT Gorakhpur, India

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MMMUT Gorakhpur, India

Coordinators

Dr A. N. Tiwari

Professor, EED
MMMUT Gorakhpur, India
&

Dr Navdeep Singh

Assistant Professor, EED
MMMUT Gorakhpur, India



Organized by

**Department of Electrical Engineering
MMMUT, Gorakhpur, 273010, UP,
(NAAC Grade "A" University)
<http://www.mmmut.ac.in>**

About University and Electrical Department

Madan Mohan Malviya University of Technology, Gorakhpur has been established in the year 2013 by the Government of Uttar Pradesh. It is non-affiliating, Academic & Research University after reconstituting the Madan Mohan Malviya Engineering College, Gorakhpur, established in 1962.

MMMUT has been awarded the prestigious "A" grade by the National Assessment and Accreditation Council (NAAC). The "A" grade has placed MMMUT amongst the India's most elite and prestigious Higher Educational Institutions (HEI) which is maintaining top standards in delivering and disseminating of quality education to its students. MMMUT has become the only UP State Technical University to bag "A" grade in the first cycle of the accreditation process.

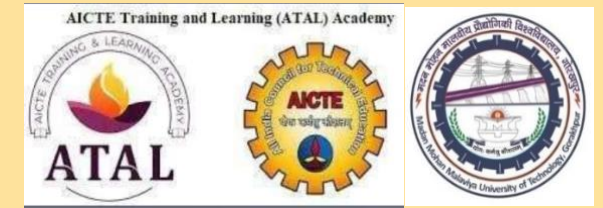
The University offers nine undergraduate programs in the disciplines of Civil, Chemical, Electrical, Mechanical, Electronics & Communication Engineering, Information Technology, Bachelor of Business Administration, Bachelor of Pharmacy and Computer Science & Engineering along with twelve MTech programs and Doctoral Programs in various specializations. It is also a QIP centre for the Ph.D. program in Electrical, Mechanical and Electronics & Communication Engineering departments.

The Department of Electrical was established in the year 1962. The program is accredited by NBA in the year 2016 and reaccredited in the year 2019. The PG course with specialization of PED (Power Electronics and Drives) and C&I (Control & Instrumentation) have also been started from 2001 and 2013 respectively.



About Gorakhpur

The Gorakhpur is well connected by road and rail to all major cities Lucknow (270 Km), Varanasi (216 Km) and Patna (220 Km). Direct flights are also available from New Delhi to Gorakhpur. The MMM University of Technology is situated on Deoria road about 9 Km from Gorakhpur Junction and 5 Km from the Gorakhpur airport.



**AICTE TRAINING AND LEARNING ACADEMY
Two WEEK- FACULTY DEVELOPMENT PROGRAMME
(Hybrid Mode)**

**ON
Energy Management Challenges for Alternative
Eco-Friendly System
(EMCAEFS)
(Sponsored by AICTE)**

ONLINE Mode	JAN 23, 2023 to JAN 28, 2023
OFFLINE Mode	FEB 06, 2023, to FEB 10, 2023
Two Week FDP	

Note

- The duration of the blended FDP will be two weeks with 14 sessions.**
- Six Online sessions from 23 Jan 2023 to 28 JAN 2023 in online mode Timing is 7.00 PM to 9.30 PM each day. Offline 8 sessions from 6 Feb 2023 to 10 Feb 2023 during 9.30 AM to 4.30 PM is conducted in EED Seminar Hall, MMMUT.**

Coordinators

Dr A. N. Tiwari
Professor, EED
MMMUT Gorakhpur, India
&
Dr Navdeep Singh
Assistant Professor, EED
MMMUT Gorakhpur, India



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About Program:

The Department of Electrical Engineering is organizing an ATAL Two Week Faculty Development Programme on Energy Management Challenges for Alternative Eco-Friendly System (EMCAEFS).

The duration of the blended FDP will be two weeks (one week online + one week offline). It will be conducted total 14 sessions. The Course is designed for Faculty Members, Engineers, PG students and Research Scholars. The course has been designed to cover both theoretical as well as the practical concepts in the respective emerging fields of Electrical Engineering along with the tools and simulators useful for the participants for their Summer Training, Projects, and Research Work.

Contents of the Course

The Course provides in-depth coverage on the following areas:

- **Impact of EV Aggregators in frequency regulation services**
- **Real-time Simulation of Grid Interface Inverter for Wind/PV Applications**
- **Simulation Methods: MIL, SIL, PIL and HIL**
- **Charging stations for electric vehicles**
- **Green Hydrogen value chain: a new and reliable energy source from energy management perspective**
- **Challenges in Renewable Integrated Power System**
- **Challenges and Opportunities in Deployment of Electric Vehicles**
- **Challenges in Renewable Integrated Power Systems**
- **Hydrogen as future fuel and fuel cell-based propulsion systems for Electric Vehicle (EVS)**
- **Smart Distribution Grid for Power Management.**
- **Renewable Energy resources using perovskite solar cell**
- **Green Energy**

The resource persons for the FDP shall be the faculty of the Institute itself, eminent speakers from other IIT's / IIT's / NIT's/ Abroad Academic & Industry Delegates/ Abroad University/ Central and State University.

Course Duration

Two Week-Faculty Development Programme on Energy Management Challenges for Alternative Eco-Friendly System (EMCAEFS).

ONLINE Mode JAN 23, 2023, to JAN 28, 2023

OFFLINE Mode FEB 06, 2023, to FEB 10, 2023

Eligibility Criteria

The faculty members of the AICTE approved institutions, Engineers, Research scholars, PG Students, Participants from Government/ Pvt Institution, Teachers, and staff of host institution.

Address for Communication

The applicants are requested to send a scanned copy of the complete registration form by e-mail to Before **JAN 23, 2023, before the time of starting of course.**

For any further query, you may contact:

Dr. A. N. Tiwari, Professor,
Dr. Navdeep Singh, Assistant Professor,
Course Coordinator, Department of Electrical Engineering
MMMUT, Gorakhpur-273010, India
Contact email: antee@mmmut.ac.in , nsee@mmmut.ac.in
Student coordinator:
Mr Ravi Kumar Gupta: Mob no. 8299359503

Important Dates

Last date of registration: JAN 23, 2023.

Intimation of selection: JAN 23, 2023

Program dates: JAN 23, 2023 to FEB 10, 2023

To Register,

Click here <https://atalacademy.aicte-india.org/login>

Registration

All Participants are exempted from paying registration fee. However, only lunch facility shall be provided to Participants. Participants have to make their own arrangements for accommodation. The certificates will only be issued to those participants who are registered on ATAL Portal www.aicte-india.org/atal and attend the program with minimum 70% attendance and score minimum 60% marks in the test conducted at the end of the program.

On

Energy Management Challenges For Alternative Eco Friendly System (EMCAEFS)

(Sponsored by AICTE))

ONLINE Mode JAN 23, 2023, to JAN 28, 2023

OFFLINE Mode FEB 06, 2023, to FEB 10, 2023

Organised by

Department of Electrical Engineering
MMMUT, Gorakhpur-273010, (UP) INDIA

1- Name:

(In Block Letters)

2- Organization:

3- Qualification:

4- Date of birth:

5- Gender: M/F

6- Correspondence Address:

7- E-mail:

8- Phone:

9- Accommodation Required: Yes/No

Date:

Place:

Signature of Applicant

S.N.	List Of Speaker	Type	Affiliation
1.	Prof SHAILENDRA KUMAR JAIN	Academic From India	Director, SLIET, Longowal, Professor (MANIT Bhopal)
2.	Prof RC Bansal	Academic from Abroad	EED, University of Sharjah, UAE
3.	Prof Jai Govind Singh	Academic from Abroad	Department of Energy, Environment and Climate Change, SERD, AIT, Thailand.
4.	Dr Sanjeet Kumar Dwivedi	Industry from Abroad	Technology Project Manager. EVERFUEL A/S, Denamrk
5.	Dr Rahul Dubey	Industry from Abroad	Member Technical Staff - Embedded AI Doulos Inc.
6.	Prof Prakash Kumar Ray	Academic From India	Department of Electrical Engineering, Odisha University of Technology and Research, (Formerly CET), Bhubaneswar.
7.	Er Ajay Kumar	Industry From India	Sr. Project Officer, UPNEDA
8.	Prof. B K Pandey	Academic From India	MMMUT Gorakhpur
9.	Prof G N Tiwari	Academic From India	IIT Delhi
10.	Prof Vijay Pratap Singh	Academic From India	Department of Electrical Engineering, REC Sonbhadra
11.	Prof. Saurabh Mani Tripathi	Academic From India	Department of Electrical Engineering KNIT Sultanpur
12.	Prof S P Singh	Academic From India	Department of Electrical Engineering, REC Ambedkar Nagar
13.	Prof Mohammed Aslam Husain	Academic From India	Department of Electrical Engineering, REC Ambedkar Nagar

2 WEEK- FACULTY DEVELOPMENT PROGRAMME

Energy Management Challenges for Alternative Eco-Friendly System (EMCEFE)

(Sponsored by AICTE) BASIC AICTE ATAL FDP , Week 1 A Typical Flow: Ethernet Class session

Week 1 – Online (7:00 pm – 9:30 pm) ONLINE MODE, ONLINE STARTS, JAN 23, 2023, to JAN 28, 2023

Day 1 (JAN 23, 2023)	Day 2 (JAN 24, 2023)	Day 3 (JAN 25, 2023)	Day 4 (JAN 26, 2023)	Day 5 (JAN 27, 2023)	Day 6 (JAN 28, 2023)
<p>7:00-7:50 Session 1 (I) Prof SHAIENDRA KUMAR JAIN Director, SLIET, Longowal Topic: Hydrogen as future fuel and fuel cell-based propulsion systems for Electric Vehicle (EVS)</p>	<p>7:00-7:50 Session 2 (I): Prof RC Bansal EED, University of Sharjah Topi : Challenges in Renewable Integrated Power Systems</p>	<p>7:00-7:50 Session 3 (I): Prof Jai Govind Singh Department of Energy, Environment and Climate Change, SERD, AIT, Thailand. Topic: Challenges and Opportunities in Deployment of Electric Vehicles</p>	<p>7:00-7:50 Session 4 (I) Dr Prakash Kumar Ray (CET Bhuvneshwar) Topic: Challenges in Renewable Integrated Power System</p>	<p>7:00-7:50 Session 5 (I) Dr Sanjeet Kumar Dwivedi Technology Project Manager. EVERFUEL A/S, Denamrk Topic: Green Hydrogen value chain: a new and reliable energy source from energy management perspective</p>	<p>7:00-7:50 Session 6 (I) Dr Rahul Dubey Member Technical Staff - Embedded AI Doulos Inc. Topic: Charging stations for electric vehicles</p>
<p>8:00–8:50 Session 1 (II) Prof SHAIENDRA KUMAR JAIN Director, SLIET, Longowal Topic: Hydrogen as future fuel and fuel cell-based propulsion systems for Electric Vehicle (EVS)</p>	<p>8:00 –8:50 Session 2 (II) Prof RC Bansal EED, University of Sharjah Topic: Challenges in Renewable Integrated Power Systems</p>	<p>8:00 –8:50 Session 3 (II) Prof Jai Govind Singh Department of Energy, Environment and Climate Change, SERD, AIT, Thailand. Topic: Challenges and Opportunities in Deployment of Electric Vehicles</p>	<p>8:00–8:50 Session 4 (II) Dr Prakash Kumar Ray (CET Bhuvneshwar) Topic: Challenges in Renewable Integrated Power System</p>	<p>8:00 – 8:50 Session 5 (II) Dr Sanjeet Kumar Dwivedi Technology Project Manager. EVERFUEL A/S, Denamrk Topic: Green Hydrogen value chain: a new and reliable energy source from energy management perspective</p>	<p>8:00 – 8:50 Session 6 (II) Dr Rahul Dubey Member Technical Staff - Doulos Inc. Topic: Charging stations for electric vehicles</p>
<p>9:00 – 9:30 Session 1 Interactions Prof SHAIENDRA KUMAR JAIN Director, SLIET, Longowal</p>	<p>9:00 – 9:30 Session 2 Interactions Prof RC Bansal EED, University of Sharjah</p>	<p>9:00 – 9:30 Session 2 Interactions Prof Jai Govind Singh Department of Energy, Environment and Climate Change, SERD, AIT, Thailand.</p>	<p>9:00 – 9:30 Session 4 Interactions Dr Prakash Kumar Ray (CET Bhuvneshwar)</p>	<p>9:00 – 9:30 Session 5 Interactions Dr Sanjeet Kumar Dwivedi Technology Project Manager. EVERFUEL A/S, Denamrk</p>	<p>9:00 – 9:30 Session 6 Interactions Dr Rahul Dubey Member Technical Staff - Doulos Inc.</p>

Week 2 - A Typical Flow (Class Room Session)

Week 2 – Offline (9:30 am – 4:30 pm) (OFFLINE MODE) OFFLINE STARTS, FEB 06, 2023, to FEB 10, 2023

Day 1 (FEB 06, 2023)	Day 2 (FEB 07, 2023)	Day 3 (FEB 08, 2023)	Day 4 (FEB 09, 2023)	Day 5 (FEB 10, 2023)
9.30 – 10.30 AM Inauguration	9:30 – 12:00 Session 9 Prof Vijay Pratap Singh (REC Sonbhadra) Topic: Impact of EV Aggregators in frequency regulation services	9:30 – 12:00 Session 11 Prof Saurabh Mani Tripathi (KNIT Sultanpur) Topic: Simulation Methods: MIL, SIL, PIL and HIL	9:30 – 12:00 Session 13 Prof Mohammed Aslam Husain (REC Ambedkar Nagar) Topic Optimum Extraction of Solar PV Energy using Global Maximum Power Point Trackers	9:30 – 12:00 Session 14 Prof G N Tiwari IIT Delhi Topic: Fundamental of Renewable Energy Generation
10:30 – 1:00 Session 7 Er Ajay Kumar Sr. Project Officer, UPNEDA Topic: Green Energy	12:00 – 1:00 Article 1 Discussion: To Review & Publish Transaction paper	12:00 – 1:00 Article 2 Discussion To Review & Publish Transaction paper		12:00 – 1:00 MCQ
1:30 – 2:30 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch		1:00 – 2:00 Lunch
2:30 – 5:00 Session 8 Prof. B K Pandey MMMUT Gorakhpur Topic: Renewable Energy resources using perovskite solar cell	2:00 – 4:30 Session 10 Prof. Saurabh Mani Tripathi (KNIT Sultanpur) Topic Real-time Simulation of Grid Interface Inverter for Wind/PV Applications	2:00 – 4:30 Session 12 Prof S P Singh (REC Ambedkar Nagar) Topic Smart Distribution Grid for Power Management	12:00 – 5.30 Travel for Visit, Visit Report (Team) & Lunch 2:00 – 4.30	2:00 – 5:00 Reflection Journal, Feedback & Valedictory Session 3:00 – 5:00
	4:30 – 5:00 Teaching Practice	4:30 – 5:00 Teaching Practice		