## NEWSLETTER



2023-2024



ANNAMALAI UNIVERSITY



**DEPARTMENT OF ELECTRICAL ENGINEERING** 

**FEAT** 







#### **VISION**

To develop the Department into a Centre of Excellence with a perspective to provide quality education and skill-based training with state-of-the-art technologies to the students, thereby enabling them to become achievers and contributors to the Industry, Society and Nation together with a sense of commitment to the profession.

#### **MISSION**

- > To impart quality education in tune with emerging technological developments in the field of Electrical and Electronics Engineering.
- > To provide practical hands-on-training with a view to understand the theoretical concepts and latest technological developments.
- > To produce employable and self-employable graduates.
- > To nurture the personality traits among the students in different dimensions emphasizing the ethical values and to address the diversified societal needs of the Nation.
- > To create futuristic ambience with the state-of-the-art facilities for pursuing research.

# CONTENTS

03	04	05	06	
ENGINEERS DAY CELEBRATION	INAGURAL FUNCTIONS (EEA & IEI(STUDENT CHAPTER)	AICTE APPROVAL	RESEARCH METRICS	
09	10	11	12	
GUEST LECTURES	INFRASTRUCTURE DEVELOPMENT	LITERARY EVENTS	PONGAL CELEBRATION	
13	14	15	16	
ELECTRO SPORTS	WOMEN'S DAY CELEBRATION	ACADEMIC/ RESEARCH PROGRESS	VALEDICTORY FUNCTIONS FOR ASSOCIATION ACTIVITIES	

## ENGINEERS DAY CELEBRATION

# IEI (STUDENT'S CHAPTER)

The Engineers Day function was celebrated on behalf of the IEI Association on 15<sup>th</sup> September 2023 in the AU69 Hall of the Department. The Head of the Department Dr. B. Baskaran presided over the function. along with the Faculties and Students.

As the Father of Indian Engineering, Dr Mokshagundam Visvesvaraya's Day of Birth is celebrated as Engineers Day. Scholarship Scheme is also named after him which to date prosperous for students in engineering careers. The IEI Association Members volunteered to organize the Events and made an Efficacious event.





## INAUGURAL FUNCTION

## EEA & IEI

(STUDENT'S CHAPTER)



The Inaugural function of Association Activities was fit on 20<sup>th</sup> September 2023 in the AUMTECH 71 Hall. The Dean, Dr. C. Karthikeyan and Head of the Department Dr.B.Baskaran presided over the function and an alumnus Dr. K. Vetrivel, Deputy Director, NPTI, Southern Region delivered the Inaugural Address.

In the Presence of the Dignitaries, the Association Elected Members took the Position and addressed the Audience with the Oath to do their duty with at most sincerity in their time at the Association.

#### **ELECTRICAL ENGINEERING ASSOCIATION (EEA)**

Chairman : M. Navinesh
General Secretary : M. Manoranjitham
Joint Secretary : M. Jeyasri
Literary Secretary : K. Subbarai

Literary Secretary : K. Subharaj M. Aarthika Joint Literary Secretary : E. Thamizhseran

Sports Secretary

M. Prathini
Placement Secretary : K.A.Sakthivasanthan

Joint Placement Secretary : B. Manikandan R.A. Naveenaah

Asst. Placement Secretary : P. Kalaivendhan
Placement In-charge : R.Lavanya, M.Nanthitha

S.S. Meenaloshini G. Yogesh

M. Gopikrishnan
: T. Ashok, S. Vignesh
E. Divyasri

Class Representatives : C.Ajay, V.Nithinkrish

S. Jagadheesan M. Saivigneshwa A.M. Sarjeet Kumar

#### THE INSTITUTION OF ENGINEERS (INDIA) STUDENTS' CHAPTER (IEI)

President : M. Vivek
Vice President : P. Subiksha
Treasurer : S.J. Risheka
Directors : S. Arun, T. S.

: S. Arun, T. Santhiya S. Ilakkiya L. Sethuraman V. Kamesh



#### All India Council for Technical Education

(A Statutory body under Ministry of Education, Govt. of India)





#### APPROVAL PROCESS 2023-24

#### Extension of Approval (EoA)

F.No. Southern/1-36948444054/2023/EOA

Date: 02-Jun-2023

To.

The Principal Secretary (Higher Education) Govt. of Tamil Nadu, N. K. M. Bld. 6th Floor Secretariat, Chennai-800009

#### Sub: Extension of Approval for the Academic Year 2023-24

Ref: Online application of the Institution submitted for Extension of Approval for the Academic Year 2023-24

Sir/Madam.

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Education) Regulations, 2020 notified on 4th February 2020 and amended on 24th February 2021 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to:

Permanent Id	1-2870850431	Application Id	1-36948444054
Name of the Institution	FACULTY OF ENGINEERING AND TECHNOLOGY	Name of the Society/Trust	ANNAMALAI UNIVERSITY
Institution Address  ANNAMALA INNIVERSITY ANNAMALA INAGAR, ANNAMALA INAGAR, CUDDALORE Tamil Nadu, 608002		Society/Trust Address	ANNAMALAI UNIVERSITY,ANNAMALAINAGAR, CUDDALORE,Tamil Nadu,608002
Institution Type	State Government University	Region	Southern
Year of Establishment	1994		

#### To conduct following Courses with the Intake indicated below for the Academic Year 2023-24

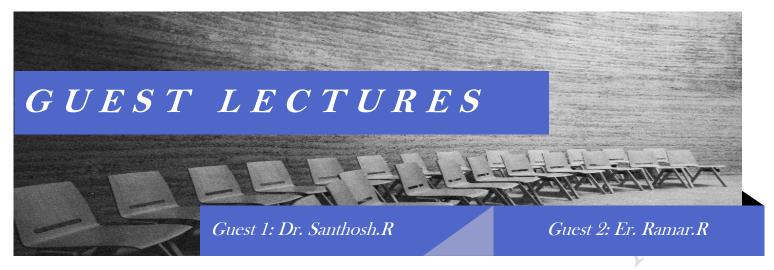
Level	Program	Course	Affiliating Body (University /Body)	Intake Approved for 2022-23	Intake Approved for 2023-24	NRI Approval Status	FN / Gulf quota/ OCI/ Approval Status
DIPLOMA	ENGINEERI NG AND TECHNOLO GY	DIPLOMA IN MINING ENGINEERING	NOT APPLICABLE	60	60	NA NA	NA
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	ELECTRICAL AND ELECTRONICS ENGINEERING	NOT APPLICABLE	120	120	NA	NA
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	ELECTRONICS AND COMMUNICATIO NS ENGINEERING	NOT APPLICABLE	60	60	NA	NA
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	ELECTRONICS AND INSTRUMENTATI ON ENGINEERING	NOT APPLICABLE	60	60	NA	NA
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	INFORMATION TECHNOLOGY	NOT APPLICABLE	120	120	NA	NA



No	Authors	Article	Journal
1	N. Veeramuthulingam, A. Ezhilarasi and M. Ramaswamy	Vibration Analysis of BLDC Motor Drive Employing Model Reference Adaptive Controller	International Journal of System Assurance Engineering and Management, Vol.14, pp.2160-2175, Aug.2023.
2	Srilakshmi K, Arun Nambi P and Aravindhababu P	Fuzzy Based Hybrid Controller for UPQC With Wind and Battery Storage Systems	International Journal of Electronics. August 2023, pp.1-26. https://www.tandfonline.com/doi/abs/10.1080/00207217.2023. 2245193
3.	Sibbala Bhargava Reddy, Ashok Kumar, R., and Sreenivasan, G.	Enhancement Of ATC With FACTS Devices in Deregulated Power System Considering Various Contingency and Benefit Margins	Journal of Advanced Research in Applied Sciences and Engineering Technology, Aug.2023
4.	Sibbala Bhargava Reddy, Ashok Kumar, R., Sreenivasan, G., and Asokan, K	Whale Optimization Algorithm Based ATC Enhancement by Installing FACTS And Wind Generators in Deregulated Power System.	Journal of Harbin Engineering University, Vol.No.44, pp.364- 375,Sep.2023.
5.	Praveen Kumar Thota, Ganapathy Somaskandan and Manikandan Mani	The Voltage Stability Analysis for Grid-Connected PV System Using Optimized Control Tested by IEEE 14 & 30 Bus System	International Journal of Experimental Research and Review, Vol. No.30, pp.109-118, Sep.2023.
6.	V. Logeshwari, M. Abirami, S. Subramanian, Hariprasath Manoharan	Multi-Objective Precise Phasor Measurement Locations to Assess Small- Signal Stability Using Dingo Optimizer	Optimal Control Applications and Methods, Wiley, Vol.No.45, Sep.2023.

No	Authors	Article	Journal
7.	Sathiyapoobalan Sundaralingam, Neela Ramanathan	Efficient Plastic Categorization for Recycling and Real-Time Annotated Data Collection with Tensor Flow Object Detection Model	Environmental Research Communications, Oct.2023.
8.	Srinivas Kunta, Kannan R and Padma S	PI Controller and Space Vector Modulation Based Direct Torque Control of Multi-Level Inverter Fed Induction Motor	Journal of Propulsion Technology, Vol.3, pp.1784- 1795, Oct.2023.
9.	Srinivas Kunta, Kannan R and Padma S	Fuzzy PI Controller and Space Vector Modulation Based Direct Torque Control of Multi-Level Inverter Fed Induction Motor	Chinese Journal of Computational Mechanics, Vol.5, pp.383-394, Oct.2023.
10.	Srinivas Kunta, Kannan R and Padma S	Direct Torque Control of Conventional Three-Phase Induction Motor Drive	High Technology Letters, Vol.10, pp.435-440, Oct.2023.
11.	Leo Arockia Raj, J P, Padma, S and Kannan R	PI And Fuzzy Logic Controlled Multiple Lift-Push- Pull Switched Capacitor Luo Converter	Journal of Propulsion Technology, Vol.44, pp.1774- 1783, Oct.2023.
12.	Manikandan K., Sasikumar S. and Arulraj R.	A Novelty Approach to Solve an Economic Dispatch Problem for A Renewable Integrated Micro-Grid Using Optimization Techniques	Electrical Engineering & Electromechanics, Vol.4, pp.83-89, Oct.2023.
13.	Remala Geshma Kumari, Arivukkannu Ezhilarasi and Naresh Pasula	A Novel Single Switch Controlled Efficient Coupled Inductor-Based DC-DC Boost Converter	Indonesian Journal of Electrical Engineering and Computer Science, Vol.32(1), pp.61-70, Oct.2023.
14	Santosh B.S.S, Mohamed Thameem Ansari M and Kantarao P	Analysis Of Passive Partial Shading Mitigation Technique for PV Array	Journal of Renewable Energy and Environment, Vol.11, pp.135- 156, Oct.2023.
15	Sibbala Bhargava Reddy, Ashok Kumar, R., and Sreenivasan, G.	ATC Enhancement in Restructured Power System Using Whale Optimization Algorithm.	Przeglad Elektrotechniczny, Oct.2023, Vol.No.99,pp.34-40.
16	Srilakshmi K, Sravanthy G, Borra S R, Balachandran P K, Reddy G P, Aravindhababu P and Selvarajan S	Optimal Design of Solar/Wind/Battery and EV Fed UPQC For Power Quality and Power Flow Management Using Enhanced Most Valuable Player Algorithm	Frontiers in Energy Research, Jan.2024, Vol.11, Article No.1342085.

No	Authors	Article	Journal
17	Srilakshmi K, Teja Santosh D, Ramadevi A, Balachandran P K, Reddy G P, Aravindhababu P, Colak I, Dhanamjayulu C, Chinthaginjala R K, and Khan B	Development Of Renewable Energy Fed Three-Level Hybrid Active Filter For EV Charging Station Load Using Jaya Grey Wolf Optimization	Scientific Reports, Feb.2024, 14(1), Article No.4429.
18	Vengadesan and Ashok Bakkiyaraj	Optimization Of Position and Rating of Shunt and Series Connected FACTS	AIMS Electronics and Electrical Engineering, Vol.8, pp.165-186, Mar.2024.
19	B.S.S. Santosh, G.Harish Kumar Varma and M.Mohamed Thameem Ansari	A Novel Cross Diagonal Pattern for Effective Shade Dispersion in TCT Configuration	Optik, International Journal for Light and Electron Optics, Elsevier Publications, pp.1- 20, Mar.2024.
20	K.S.V.V. Prasada Rao, M. Anitha and V. Srinivasa Rao	Improved KY Buck Boost Converter with Meta Heuristic Optimisation for HRES Based EV Charging	International Journal of Electrical and Electronics Engineering, Vol.11(3), pp.25- 41, March 2024.
21	Manikandan Sampath, Mohamed Thameem Ansari M and Venkatasubramanian Ramaswamy	An Efficient Minimum Cost Battery Charging and Discharging Scheduling Scheme for Electric Vehicle Using Hybrid Energy Valley-Pathfinder Algorithm	Energy Sources, Part A: Recovery, Utilization and Environmental Effects, Taylor & Francis Publications, Vol.46, pp.5474-5496, Mar.2024.
22	Sathiyapoobalan Sundaralingam and Neela Ramanathan	Recyclable Plastic Waste Segregation with Deep Learning-Based Hand-Eye Coordination	Environmental Research Communications, Apr.2024
23	Phani Kumar, E.B. Elanchezhian, Pragaspathy Subramani and S. Subramanian	Assessment Of Power Qualityenhancement in A Grid-Tied PV Network Via ANN-Based UPQC	Recent Advances in Electrical & Electronic Engineering, Vol.No.17(5),2024.
24	NSD Prakash Korlepara, EB Elanchezhian, S Pragaspathy, and S Subramanian	Novel Multi-Port Converter for Distributed MPPT Operation in Solar PV System	Science and Technology for Energy Transition, Vol.No.79(5), June 2024.



Guest Lecture 1: "Effects of Partial Shading in Renewable Energy Systems" was delivered by Dr. R.Santhosh, (Assistant Professor, EEE Department of SRKR Engineering College, Andhra Pradesh) on 25<sup>th</sup> September 2023.

**Guest Lecture 2:** "Global Renewable Power Generation Market and Technological Development" was delivered by Er. R. Ramar, (Deputy director NPTI, Neyveli) on 10<sup>th</sup> October 2023.







## INFRASTRUCTURE DEVELOPMENT

A New Lab was Additional to the Department this Academic Year. The Protection Switchgear Simulation and Research Lab resides on the first floor of the EE building.

It contains PMU (Phasor Measuring Unit) along with advanced computers (LabVIEW Software) and electromechanical and numerical relays of standard companies are available in the lab.





# LITERARY EVENTS



Literary Events were organized by the Engineering Association (EEA) and Institution of Engineers (India) Students Chapters from 09.10.23 onwards to 16.10.23 at AU 69 Hall of our Department. The Events aimed to encourage literary activities among the students and provide a platform for them to showcase their literary skills. Literary Events Initiated by Dr B. Baskaran HDEE.

Faculty Members Dr M. Mohamed Thameem Ansari, Dr R. Neela, Dr M. Anitha, Dr K. Gayathri and Student Sectaries Mr K Subharaj and Ms M. Aarthika, Association Chairman Mr M. Navinesh and Mr M. Vivek accompanied the events. About 150 students Participated in the Events.

Knowledge With Action Converts Adversity into Prosperity

~ AVUL.PAKIR. JAINULABDEEN ABDUL KALAM





BOOKS ARE
THE MEANS BY
WHICH WE
BUILD
BRIDGES
BETWEEN
CULTURES

~Dr. Sarvepalli Radhakrishnan

## PONGAL CELEBRATIONS

Pongal Celebration for the students was held on 12<sup>th</sup> January 2024 in the Department and Competition were held in the Drawing Hall, Annamalai University





# ANNUAL SPORTS MEET

Department of Electrical
Engineering has Organized the
sports extravaganza "Electro
Sports" for the students during
the 26th and 27th of February in
the pavilion of Annamalai
University in the Presence of Dr
B. Baskaran Prof & Head
Department of Electrical
Engineering.

Students actively participated in various sports events like throw ball, volleyball, football, basketball, Badminton, Cricket, Chess, and Kabaddi.



WHATEVER YOU WANT TO DO, DO WITH FULL PASSION AND WORK HARD TOWARDS IT.DON'T LOOK ANYWHERE ELSE.

VIRAT KOHLI

ELECTRO
SPORTS'24

## WOMEN'S DAY CELEBRATIONS

Women's Day celebrations were held on 8<sup>th</sup> March 2024 in AU69 hall of Department of Electrical Engineering.



Chief guest Dr. S. Poongothai, Professor and Head of the Department of Civil Engineering delivered a speech on the topic "Theme of International Women's Day 2024

# **ACADEMIC RESEARCH & PROGRESS** ■ No of Students Placed in Companies No.of Students Attended the intership Program No.of B.E Projects ■ No.of M.E Projects ■ No.of Ph.D Dissertations Awarded ■ No.of Students Admitted to Research ■ No.of Research Articles by Faculty **■ No.of Existing Research Projects** No.of Students Attended the intership Program

## VALEDICTORY FUNCTION

## ASSOCIATION ACTIVITIES'23-24

The valedictory function for the academic year 2023-2024 was held on 17<sup>th</sup> April 2024 in AUMTECH hall. The Dean, Dr. C. Karthikeyan presided over the function and Mr. Ezhimaaran Arumugam, Cofounder and Managing director of Axis Global Automation, delivered the valedictory address. Students of 2nd, 3rd and 4th year were awarded with certificates for their winning in Electro Sports and Association Activities











Commemorative Photo of Graduation Batch'24 (FEAT Main Block Entrance-Vintage Spot)

### EDITOR - IN - CHIEF Dr. I. A. Chidambaram, Professor / EEE

Editorial Team
Dr. M. Mohammed Thameem Ansari, Professor/EEE
Dr. R. Bensraj, Associate Professor/EEE
Dr. S. Sasikumar, Associate Professor/EEE