

# STAFF AND STUDENTS DEPARTMENT OF ELECTRICAL ENGINEERING



## WELCOMES

you





## Andhra University Visakhapatnam

DEPARTMENT OF ELECTRICAL ENGINEERING, AU COLLLEGE OF ENGINEERING, ANDHRA UNIVERSITY

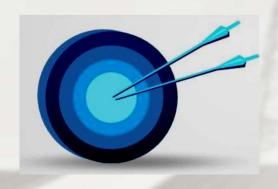


#### Vision

To enhance the potential of the Department to fulfil the needs of the stakeholders of future generations in competing with the global peers



## Mission



- To create an environment that helps creativity in students and enriching with essential resources to train students in advanced learning & critical thinking in solving dynamic challenges in society in the field of electrical engineering
- To equip and strengthen faculty and research scholars to instigate effective teaching-learning process and contemporary research.
- By encircling industry interaction to offer reliable consultancy services.



To compete with the global technological challenges through exemplary teaching, research and development programs with clear vision and simple mission





## **Quality Objectives**

- By imparting globally focused education
- By creating world class professionals
- By establishing Synergic relationships with industry and society
- By developing state of art infrastructure and well endowed faculty
- By imparting knowledge through team work and incessant efforts







- 1955
- ENGINEERING SECTION
  - B.E(ELECTRICAL ENGINEERING)
- 1963
- M.E (MACHINES)
- M.E (POWER SYSTEMS)
- Ph.D (ELECTRICAL ENGINEERING)
- M.E (POWER SYSTEMS AND AUTOMATION)
- M.E(CONTROL SYSTEMS ENGINEERING)
- 1972
- B.E (ELECTRONICS & COMMUNICATION **ENGINEERING**)
- 1978
- M.E (COMPUTER ENGINEERING)
- 1983
- DEPARTMENT TRIFURCATION
  - ELECTRICAL ENGINEERING
  - ELECTRONICS & COMMUNICATION ENGINEERING
  - COMPUTER SCIENCE & SYSTEM ENGINEERING



#### **FACULTY COMPOSITION**

Professors	<b>Associate Professors</b>	Honorary Professor	Assistant Professors (C)
5+2W	2+1W	1	<b>3W</b>

#### **FACULTY ACTIVITIES**

Average Age	: 42 years	Mentors for Start Ups	:02
Average Experience	: 24.3 years	Memberships in Professional Bodies	:31
Men: Women	: 7:6	<b>Guest Lectures Delivered</b>	:78
Ph.D. Holders	: 13	Patents Published	:34
<b>Faculty Student Ratio</b>	: 1:10	Research Projects Completed and Ongoing	:08
<b>Tenure Track Faculty</b>	:12	Consultancy Works Completed and Ongoing	:06
Ph.D's Produced	:93	Awards Received by Faculty	:28
Research Publications	:757	Workshops/Conferences Conducted & Attended	:264

## **Faculty Information**

Name of the Faculty	Experience	Area of Research	Ph.D's during last 5 Years	Total PhD's
		REGULAR FACULTY		
		Professors		
Prof.K. Vaisakh	30	Microgrid, Renewable Sources, Optimization Techniques	05	22
Prof.G. V. Siva Krishna Rao	29	Power Systems and Automation, Distributed Generations, BLDC Motors, SRM Drives, Electrical Vehicles	03	08
Prof.K. Rama Sudha	29	Artificial Intelligence, Internet of Things, Fuzzy Systems	06	19
Prof.P. Mallikarjuna Rao	26+1*	Machines and Control Engineering	08	12
Prof.T. R. Jyothsna	22+4*	Power System Dynamics and Stability, Renewable Energy, Power Electronic Devices and Controllers, Application of Power Electronic Devices to Power Systems, Microgrids	02	08
Prof.Ch. V V S. Bhaskar Reddy	26	Electrical Power Systems, Synchrophasor applications, Distribution Systems, Real-time applications	02	02
Prof.N. Prema Kumar	22	AI, Renewable Sources, Distribution Systems	03	07
<b>Prof.M. Gopichand Naik</b>	19	HVDC, Renewable Sources, Power Systems	01	02
		Associate Professors		
<u>Dr.K. Padma</u>	17	Microgrid, Optimization Techniques, IoT	01	03
Dr.R. Srinu Naik	17	FACTS, Transmission and Distribution Systems	04	07
Dr.B. Amarendra Reddy	22	Control Theory and Applications, Fuzzy Control, Control of Multi-Input DC_DC Converters. Modeling And Control, Sliding Mode Control	01	01

## **Faculty Information (Contd..,)**

Name of the Faculty	Experience	Area of Research				
	HONORARY PROFESSOR					
Sri. G. Bhimeshwar Rao	02+25*	Power Systems Operation and Control				
	Assistant Professor (C)					
Dr. K Aravinda Shilpa	11	Power and Industrial Drives				
<u>Dr M Divya</u>	11	Power Systems , Renewable Energy, Power Electronics				
Dr. M Revathi	11	Power Electronics Drives and Control				

<sup>\*</sup> Industrial Experience



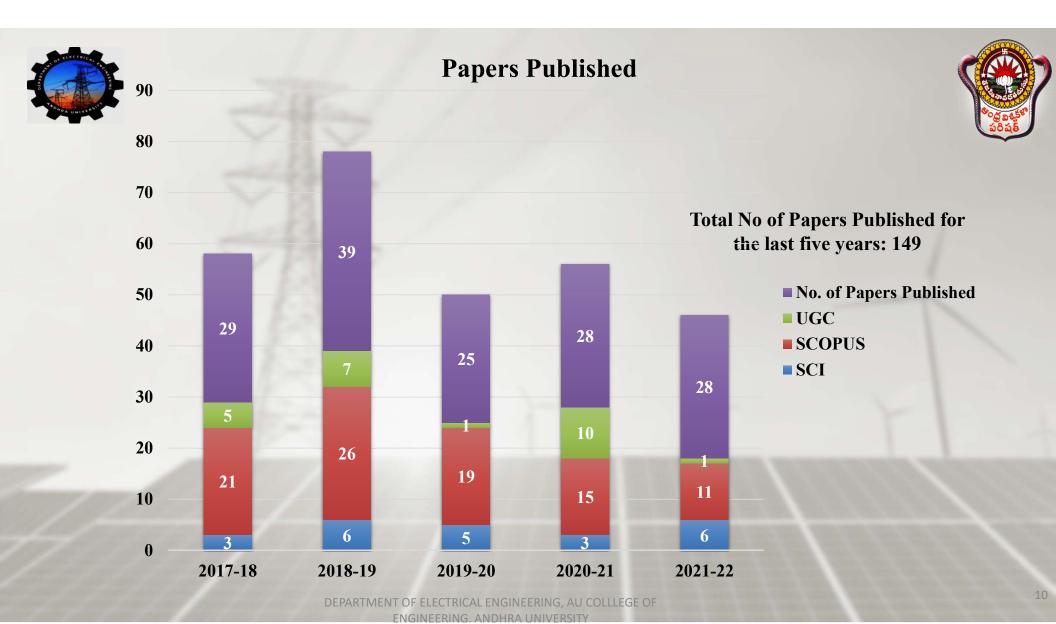


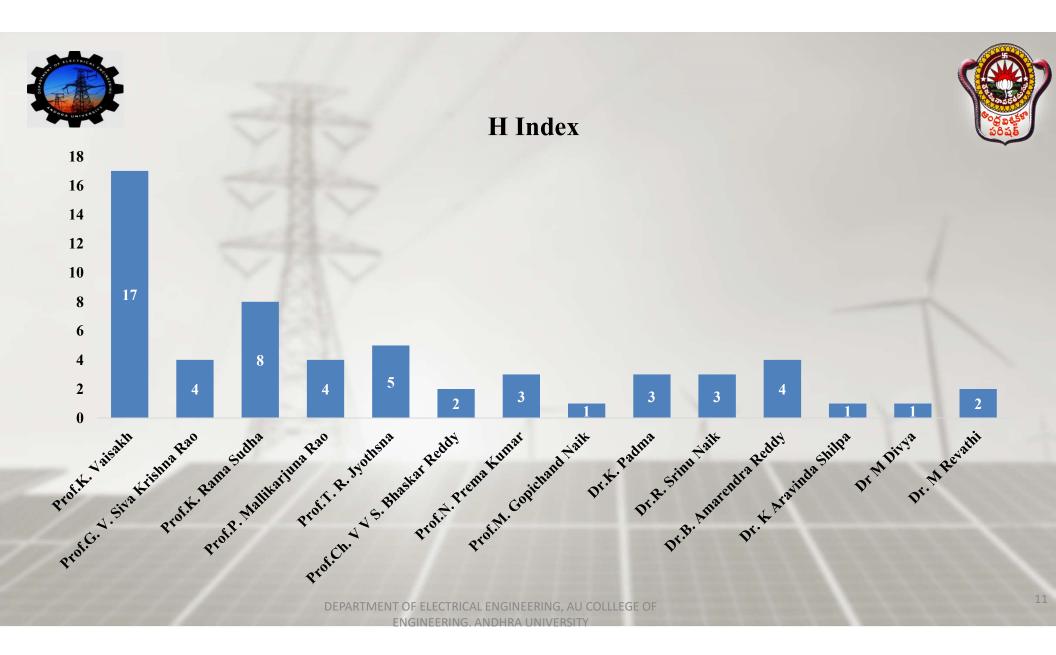
Ph.Ds- 29
Papers Published- 110
Research Projects-06
Consultancy Works- 02
Mentors for Start Ups-01
Awards-10

Power Systems and Automation

Research Groups

Control Systems Engineering Ph.Ds- 09
Papers Published- 39
Research Projects-02
Consultancy Works- 02
Mentors for Start Ups-01
Awards-01





## **Research Projects Completed**

AOHDA UNIVERDIT	No	Name of the Investigator	Project No	Funding	
	5.110	Traine of the investigator	Trojectivo	Agency	Title of the project and duration
	1	Prof.K. Vaisakh	CRG/2018/ 0002041	SERB-CRG	Seamless Transition Of Interconnected And Islanded Operation of Dc Microgrid Using Hybrid PV Fuel Cell System, March 2019 to March 2022
	2	Prof. K. Vaisakh	TAR/2018/0 00390	SERB-TARE	Smart Grid Security Control Using Nature-Inspired Decentralised Cooperative Metaheuristic Strategies, March 2019 to March 2022
	3	Prof. K. Rama Sudha	8- 194/RIFD/R PS(POLICY )/2018-19	AICTE	Implementation of Fuzzy Logic Power System Stabilizer: A Systematic Approach January 2010 to March 2013
	4.	Prof. K. Rama Sudha	8- 194/RIFD/R PS(POLICY) /2018-19	AICTE	A Location-Dependent Data Encryption for Mobile Information System January 2010 to March 2013
DEPARTMENT OF	5.	Prof. K. Rama Sudha	8- 194/RIFD/R PS(POLICY) /2018-19	AICTE	Development and implementation of Type-2 fuzzy logic system for interconnected power systems for load frequency control: A systematic approach.

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S.N	No	Name of the Investigator	Project No	Funding Agency	Title of the project and duration
6	<b>.</b>	Prof. K. Rama Sudha	SEED MONEY GRANT/ 2019	AU	Development & Verification of a Novel State Flow- Based Maximum Power Point Controller for Photovoltaic System by Rapid Control Prototyping
7	7.	Prof. P. Mallikarjuna Rao	APSECM 01/21	APSEEDCO	Design and Development of Energy efficient water pumping system using BLDC technology 2021-2023
8	3.	Prof. P. Mallikarjuna Rao	SEED MONEY GRANT/ 2020	AU	Critical Analysis and Design of High power PM synchronous motor

## **Research Projects Ongoing**

S.No	Name of the Investigator	Project No.	Funding Agency	Title of the project and duration	
1	Prof. P. Mallikarjuna Rao	2020/11666	Bharat Atomic Research Center	Design and Testing of Electrical Magnetic Welding 2020-2022	







Name of the consultant	Name of consultancy project	Consulting/Sponsoring agency with contact details	Year
Prof. P. Mallikarjuna Rao	Third Party Quality Control	CPWD	2018
Prof. P. Mallikarjuna Rao	Vetting of Drawing	DGNP	2023
Prof. P. Mallikarjuna Rao	Design Based report of IIPE	CPWD	2023
Prof.Ch V V S Bhaskara Reddy	Environmental and Social Impact Assessment of the Power for All (24X7) scheme of APSPDCL funded by World Bank	APSPDCL & APEPDCL	2020
Dr. R. Srinu Naik	Earthinig For Hangers	Ins Kalinga	2020



## **Patents**



S.No	Year	Patents
1	2019-2020	4
2	2020-2021	7
3	2021-2022	11
	Total	22

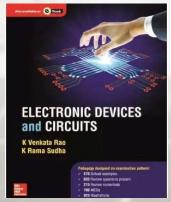
A LOW COST PORTABLE EARTH DETECTING SAFETY PLUG POINT	Intelligent Hybrid Implementation of EV and Smart Grid Charging Station
♣ 1.Dr.K.VAISAKH 2 . Dr. PASALA GOPI 3 . Dr.P.SATHEESH KUMAR 4 . Dr. THANIKANT SUDHAKAR BABU 5 . Mr. KARTHIK BALASUBRAMANIAN 6 . Dr. SURESH SRINIVASAN	■ U R Sankar Yalavarthy, Venkata Siva Krishna Rao Gadi
■ Patent No. 202141006933  Patent No. 20214100693  Patent No. 2021410069  P	Patent No. 1 Pengineering and Technology Published
iii Filed 2021-02-19 iii Published 2021-02-26	iii Filed 2021-10-19 iii Published 2021-10-29
SYSTEM AND A METHOD FOR AN INTELLIGENT/AUTOMATIC TUNING OF POWER CONVERTER OF ELECTRIC VEHICLE FOR CHARGING THE BATTERY THEREOF	Floating Solar Analysis with Electrolyzer and Fuel Cell an Efficient Analysis Using Mayfly Algorithm
♣ 1 . Dr.K.VAISAKH 2 . Dr. M. PADMA LALITHA 3 . Dr.P.BALACHENNAIAH 4 . Dr. K. AMARESH 5 . S. MUQTHIAR ALI 6 . Dr.S.JEYASUDHA	♣ Arava Madhu Babu, Dr. G.V. Siva Krishna Rao
■ Patent No. 202041055437   ② Engineering and Technology   ☑ Published	■ Patent No. 2   © Engineering and Technology   © Published
iii Filed 2020-12-21 iii Published 2020-12-25	iii Filed 2021-11-16 iii Published 2021-12-03

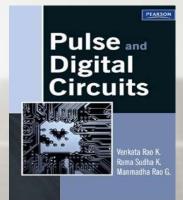


## Books authored by the faculty



S. No	Name of the Faculty	Title
1.	Prof. K. Vaisakh	<ol> <li>Elements of Electrical Machines         School of Distance Education, Andhra University     </li> <li>Power System Analysis and Stability         School of Distance Education, Andhra University     </li> </ol>
2	Prof. K. Rama Sudha	3. Electronic Devices and Circuits
2.	Prof. K. Kama Sudna	4. Pulse and Digital Circuits
3.	Dr. K. Padma	5. Artificial Intelligence: A Beginners Guide



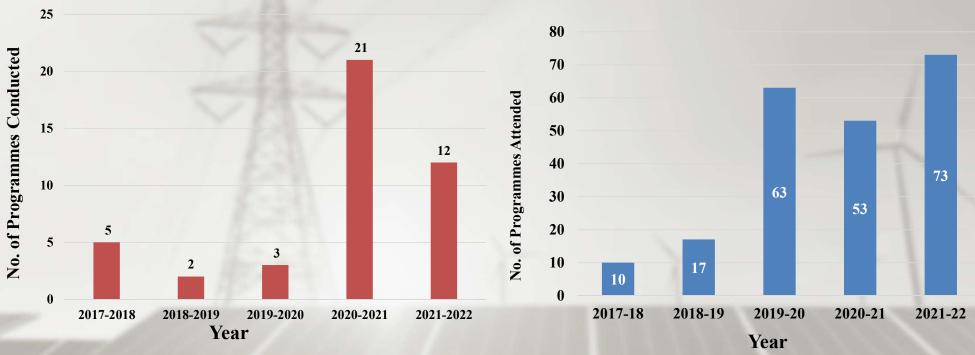






## Workshop/Seminar/Conferences/Training Programmes Attended & Conducted





Total No of Programmes Conducted for the last five years: 43

Total No of Programmes Attended for the last five years: 216



#### Elite NPTEL Online Certification



This certificate is awarded to

#### CHINTAPALLI VEERA VENKATA SATYA BHASKARA REDDY



**Computer Networks and Internet Protocol** 

with a consolidated score of 87 % Online Assignments 22.85/25 Proctored Exam 64.28/75

Total number of candidates certified in this course: 1700

Jan-Apr 2022 (12 week course)



Indian Institute of Technology Kharagpur

To validate and check scores: https://nptel.ac.in/



#### Certificate of Participation



#### This is to certify that Prof./Dr./Mr./Mrs./Ms.

Dr. K. Padma

has participated in All India Council for Technical Education(AICTE) sponsored One-week Online Short-Term Training Program (STTP) on "Mastering Self-Motivation and Attitude - Art of Living ", Phase-III during 14th -18th February 2022 organized by Department of Electrical Engineering, A.U College of Engineering (A), Andhra University.



Prof.P.Malikariun Rao Chairperson







#### Elite

## NPTEL Online Certification (Funded by the MOE, Govt. of India)



#### IYOTHSNA RADHAKRISHNAN TUMMALA

for successfully completing the course

Electric Vehicles - Part 1

with a consolidated score of 62 % Online Assignments 24.17/25 Proctored Exam 37.5/75

Total number of candidates certified in this course: 569

Devendra Jalihal

Prof. Devendra Jalihal Chairman Centre for Continuing Education, IITM

Roll No:NPTEL22EE53S34420470

Indian Institute of Technology Madras

Feb-Mar 2022 (4 week course)







To validate and check scores: https://nptel.ac.in/noc



#### **NPTEL-AICTE Faculty Development Programme**

This certificate is awarded to

#### AMARENDRA REDDY BHIMAVARAPU

for successfully completing the course

#### **Nonlinear and Adaptive Control**

with a consolidated score of 75 %



Roll No: NPTEL23EE22S45891842

Duration of NPTEL course: 4 Weeks

Industry Partner
DILIGENTEC SOLUTIONS



**CERTIFICATE** 

Publication Partner 2 Springer

This certificate is presented to



**SPEE 1017** 

BHIMAVARAPU AMARENDRA REDDY Asst. Professor, Department of Electrical Engineering, Andhra University, Visakhanatnam

for presenting the research paper entitled "Second order sliding mode control for second order process with delay time using different control algorithms" in the Second International Conference on Advances in Electrical and Computer Technologies 2020 (ICAECT 2020) held at The Hotel Aloft, Coimbatore, Tamil Nadu, India during 12 - 13, June 2020.







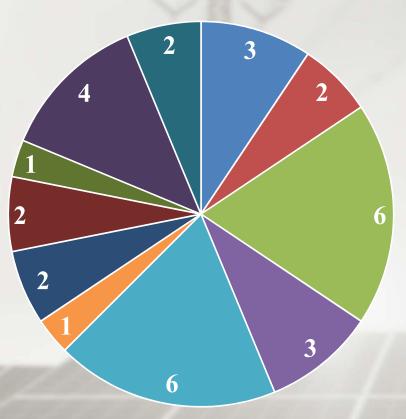
DEPARTMENT OF ELECTRICAL ENGINEERING, AU COLLLEGE OF

F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



#### **Faculty Administrative Positions**





- Head of the Department
- **■** Governing Body Member (BOG)
- **AICTE and UGC Committee members**
- Dean
- Board of studies
- Principal
- Board members for research organizations
- Honorary Director
- State Government Convener for various entrance Examaninations
- **■** Co-ordinator for various commites
- Nodal officer for Various programmes



## **Awards and Achievements**

S. No.	Name of the Awards	Name of the Awardee	Name of the Awarding Agency	Year
1	Best Academic Administrater Award	Prof. K. Vaisakh	Govt. of Pondicherry	2017
2	International Best Senior Faculty Award	Prof. K. Vaisakh	IACRD	2018
3	Education Leadership Award	Prof.K. Vaisakh	Visakhapatnam Education Leadership Award-2018	2018
4	100 Most Dedicated Professors	Prof.K. Vaisakh	World Education Congress	2019
5	Dr. Sarvepalli Radha Krishna Award Best Academician of the year	Prof . K. Rama Sudha	Andhra University	2022
6	Best Teacher Award	Prof .K. Rama Sudha	State Government of Andhra Pradesh	2023
7	Best Paper Award	Prof .K. Rama Sudha	IIT BHU	2020
8	Best Paper Award	Prof .Ch.V.V.S Bhaskara Reddy	Springer and NIT Jamshedpur	2020
9	Best Woman Faculty Award	Dr.K.Padma	Novel Research Academy	2020
10	Global Teacher Award	Dr.K.Padma	AKS Awards	2020
11	Best Paper Award-UPCON	Dr. B. Amarendra Reddy	IIT BHU	2017



## Awards and Achievements (Count..,)





#### **ANDHRA UNIVERSITY**







GOVERNMENT OF ANDHRA PRADESH



Dr. Sarvepalli Radhakrishnan Award

Prof. KASIBHATLA RAMA SUDHA, Department of Electrical Engineering, Andhra University College of Engineering, is hereby recognized with the BEST ACADEMICIAN OF THE YEAR - 2022 for her commendable record of teaching and research.

Registrar

#### DEPARTMENT OF HIGHER EDUCATION STATE TEACHER AWARDS-2023

September 5th 2023, Visakhapatnam

#### Prof. K. Rama Sudha

Department of Electrical Engineering Andhra University, Visakhapatnam

is awarded this Certificate of Merit and Medal in recognition of his/her meritorious service as a Teacher at University Level on 5th September, 2023 at Visakhapatnam.







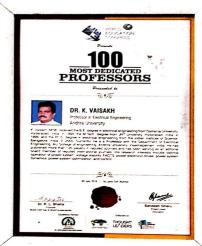


It is pleasure to inflore you that your research paper titled " Rabust Multivariable Counciller Design Using H-Infinity Loop Shaping For TIFO( DC-DC Converse", presented in the 2 nd International conference UPCON 2016 has been selected as Dest Paper.









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#### SUPPORTING STAFF (ADMINISTRATIVE & TECHNICAL)

S.No.	Designation	Number
1.	Junior Assistant	1
2.	Record Assistant	2
3.	Attender	3

S. No.	Designation	Number
1.	Foreman	1
2.	Senior Mechanic	1
3.	Mechanic	3
4.	Helpers	2

#### SUPPORTING STAFF AWARDS

S.No.	Name of the Employee	Name of the Award
1	M. V. Ramana	Best Employee 2016
2	B. Manga Raju	Best Employee 2018
3	K. Venkayamma	Best Employee 2019
4	K. Kiran Kumar	Best Employee 2019



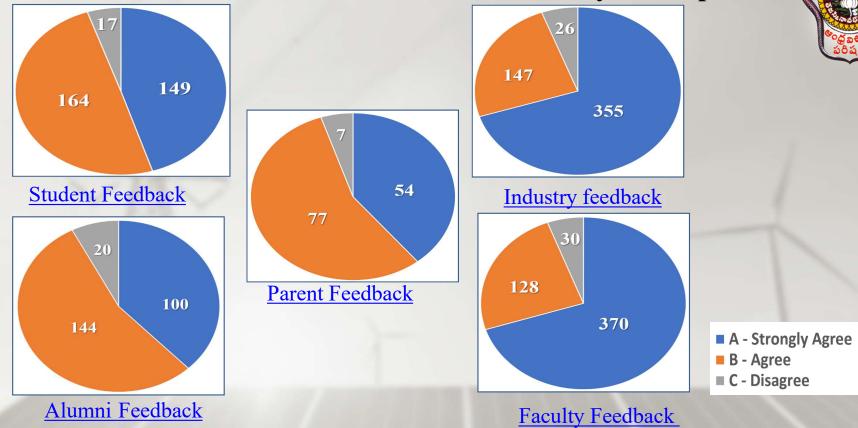






#### Feedback for Curriculum Collected and Analysed Report





**Active Feedback is in place** 

- Collecting feedback from all stakeholders
- Analyzing it
- Identifying and drawing significant indicators to enhance the learning effectiveness.



# Courses offered & Electives/ MOOCS Courses CO's



## CBCS/AICTE/APSCHE/OBE Scheme

Programme Code	Programme Name	Status of implementation of CBCS / elective course system (Yes/ No)	Year of implementation of CBCS / elective course system	Year of revision
3-1-14	B.Tech	Yes	2015-2016	2019-20 2020-21 2021-22
3-2-27	M.Tech (Power Systems and Automation)	Yes	2018-2019	2019-20
3-2-26	M.Tech (Control Systems Engineering)	Yes	2018-2019	2019-20



## CO mapping for course: Electrical Machines-II



Final CO Calculation						
Course Outcomes	Overall CO Attainment without Indirect Assessment	Overall CO Attainment with Indirect Assessment	Level Attained 1/2/3			
CO1	91.43	92.51	3			
CO2	88.57	90.23	3			
CO3	91.43	92.51	3			
CO4	88.57	89.59	3			
CO5	88.57	89.80	3			
CO6	87.14	88.79	3			
	3					

#### **Electrical Machines-II**

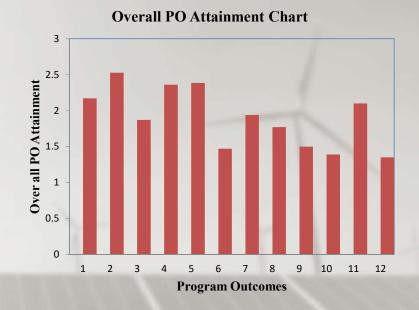






## Overall PO attainment (2019-20 batch)

POs	Direct Attainment	Indirect Attainment	Direct Attainment (80%)	Indirect Attainment (20%)	Overall PO attainment
PO1	2.03	2.75	1.62	0.55	2.17
PO2	2.47	2.75	1.98	0.55	2.53
PO3	1.65	2.75	1.32	0.55	1.87
PO4	2.26	2.75	1.81	0.55	2.36
PO5	2.29	2.75	1.84	0.55	2.39
PO6	1.21	2.50	0.97	0.5	1.47
PO7	1.80	2.50	1.44	0.5	1.94
PO8	1.50	2.85	1.20	0.57	1.77
PO9	1.19	2.75	0.95	0.55	1.50
PO10	1.06	2.70	0.85	0.54	1.39
PO11	2.00	2.50	1.60	0.5	2.10
PO12	1.06	2.50	0.85	0.5	1.35







## **Demand Ratio**

Programme Name	Items	2017-18	2018-19	2019-20	2020-21	2021-22	Average Demand Ratio
	No. Of Seats Sanctioned	40	40	50	40	40	
B.Tech	Eligible Students	145428	132281	133003	133072	133072	
(EEE)	Demand Ratio	3636	3308	2661	3327	3327	3252
M.Tech	No. Of Seats Sanctioned	18	18	18	18	18	
(PSA)	Eligible Students	26677	2381	20986	20165	20165	
	Demand Ratio	1482	133	1166	1121	1121	1005
M.Tech	No. Of Seats Sanctioned	18	18	18	18	18	
(CSE)	Eligible Students	2667	2381	20986	20165	20165	
	Demand Ratio	1482	133	1166	1121	1121	1005



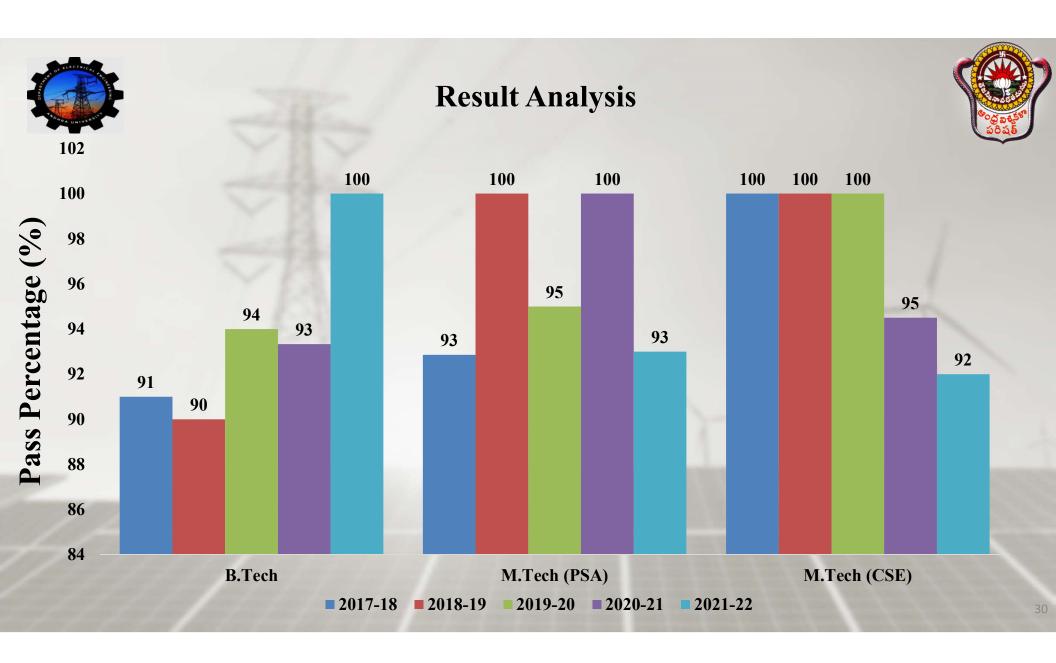


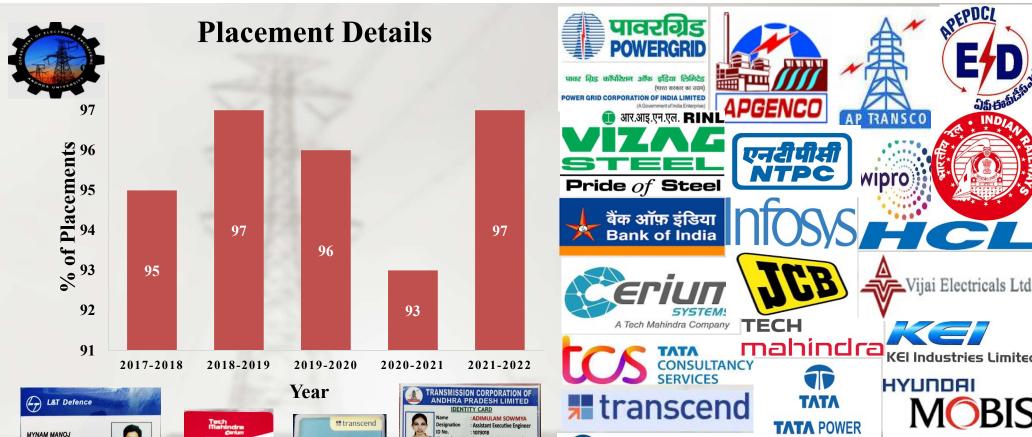


Number of Students							
Course Name	2017-18	2018-19	2019-20	2020-21	2021-22		
B. Tech Electrical Engineering	210	210	220	220	220		
M. Tech Power System and Automation	36	36	36	36	36		
M. Tech Control System Engineering	36	36	36	36	36		
Total No. of Students	282	282	292	292	292		
No. of Faculty	28	28	28	27	26		
Faculty- Student Ratio	1:10	1:10	1:10	1:10	1:11		

**Average Faculty – Student Ratio: 1:10** 

**Average Mentor – Mentee Ratio: 1:10** 













ITC Limited



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## **Awards to Students**



Year	Name of the award/medal	Team/Indi vidual	Inter University/State/ National/Internati onal	Name of event	Name of Student
2017-2018	Winner In Badminton	Individual	Andhra University	Department games	B Parthasashank
	Winners Badminton (Mixed Doubles)	Team	Andhra University	Department games	D N S Keerthi V A S Rahul
	<b>Topper In EEE</b>	Individual	Andhra University	Department Day Celebration	A H Suma Sree
2018-2019	Best Essay Award	Individual	The Institute Of Engineers	Engineers Day Celebration	B Mouni Madhuri
	Best Essay Award	Individual	The Institute Of Engineers	Engineers Day Celebration	P Mounika
	Inter University (Cricket)	Team	Andhra University	National University Games	P. Vandana
	Gold Medal in Rifle Shooting	Individual	National Level	Thal Sainik Camp	D. Manisha
2019-2020	<b>Topper In EEE</b>	Individual	Andhra University	Dept. Annual Award	S S L Saraswati
2021-2022	Topper In EEE	Individual	Andhra University	Dr. R. Vijaya Santhi Memorial Award	T. Naresh Reddy



#### **Up Skilling Programmes**

S.No.	Name of the Programme	No. of Students Participated
1.	Database Administration Fundamentals	86
2.	Introduction to Python Fundamentals	103
3.	Azure AI Fundamentals	83
4.	Azure Fundamentals	83





#### **NEWS Letters**



Volume - 1 MAY - 14 - 2022



"It is a great privilege and home to be a part of the ministe to reade: "Indion tutterrilly" a name to redon within the madernic fraternity by giving a strong impetus to creating an extrement of homeledge, application, and holistically impriving yould be become leadered homerors. Lettice that the riper of the contemporary world will require haveledgealted preferences in the Life of Every Student's the Privity of any administration. We how forward as a deep engagement of his Market. Indion's feath great deep with proposition and the contract of his dealer and register in the Life of Every Student's the Privity of any administration. We how forward as a deep engagement of his Market. Indion's feath great Community by position admines in the proposition of the Community of the Privity of the Community of the Community transformative challenges and the Community of the Community of the Community of the transformative challenges and the Community of the Community of

#### Prof. P.V.G.D. Prasad Reddy

Vice Chancellor

\*Andbra University College of Engineering (A) bas emerged as the Technological destination for the student community of the rising State of Andbra Fradesh.

No. after lading charge as Principal, has helds fin the Tarner Create Compact Philosophy Indianal per the coalizing of the co



Prof. P.Srinivasa R.

#### DEPARTMENT OF ELECTRICAL ENGINEERING

The Inspartment of Electrical Engineering has been started in 1985 as one of the three constituents of the Department of Engineering in studies Invited Intervention of Engineering in studies Invited Intervention of Engineering and Polyroganic in Electrical and Dectronics Engineering and Polyroganics in Process's Secured Automation and Control-Systems Engineering.

#### **Industrial Visit**







33



#### **ALUMNI ACTIVITIES**



Renovation of Seminar Hall by 1976-81 batch : Rs.1.76 Lakhs

Donations for development of New Conference hall cum Computing Lab by 1981-84 batch

: Rs.5.59 Lakhs

B.V. Nageswara Rao, Business Chairman GMR Group

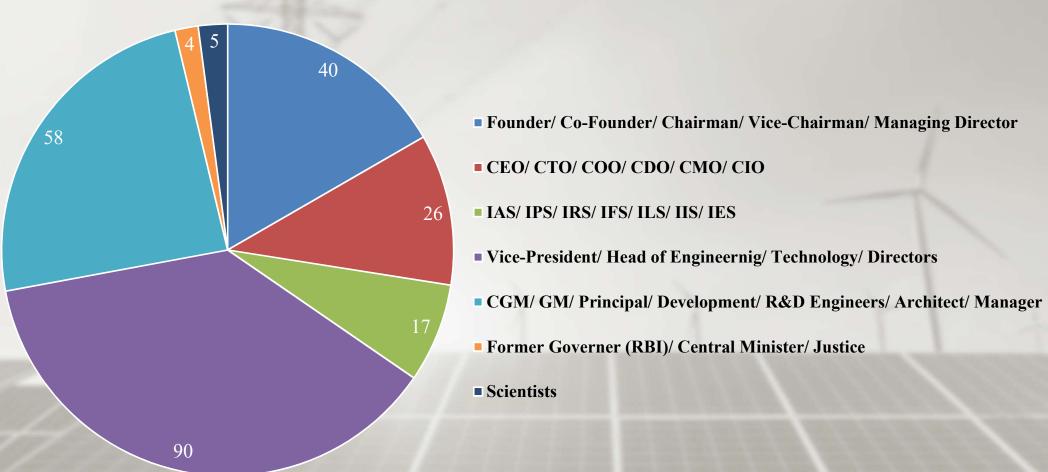
sponsored for construction of First Floor PG wing in Memory of his Parents

: Rs.11 Lakhs

**Knowledge Sharing events by Alumni** 

: Around 250

# Interactive Sessions with Prominent Personalities (Industries & Various Fields) Around the Globe:







## Infrastructure

S. No.	Academic Facility	Area in m <sup>2</sup>
1.	Lecture Halls	311
2.	Laboratories	1176
3.	Seminar hall- 2No's	376
4.	Library	63
5.	<b>HOD, Faculty &amp; others</b>	1000
6.	<b>New First Floor building</b>	930
	Total Built up Area	3866



## **Class Rooms**



#### **UG class Rooms**



UG Room No:123



UG Room No:124



UG Room No:125



PG Room:GF1



PG Room:GF2

DEPARTMENT OF ELECTRICAL ENGINEERING, AU COLLLEGE OF ENGINEERING. ANDHRA UNIVERSITY





## **Seminar Halls**

Two Seminar hall with a capacity to accommodate 200 members each







# Computing Equipment /Smart Boards Projector, Wi-Fi / LAN, Audio, Video Recording facilities



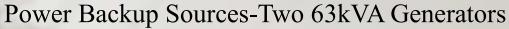


Around 52 Systems, 02 Laptops, 10 Digital Screens Printers & Coping Machines, 02 PA Systems















Generating Capacity of both Renewable Energies 10 kVA





**Solar Panels** 



## **Research and Development Resources**

## S.

## Laboratories at a glance



**Control Systems** 



Measurements



Networks



**Machines I & II** 



**Power Electronics** 



Power Electronics Drives



## Research and Development Resources (Contd..,)

## Laboratories at a glance







**Energy Systems** 







**dSPACE** 

**Permanent Magnet Brushless DC motor** 

Wind Emulator and DC-DC Converters

DEPARTMENT OF ELECTRICAL ENGINEERING, AU COLLLEGE OF ENGINEERING, ANDHRA UNIVERSITY



## Research and Development Resources (Contd..,)

### In addition to Regular Academic Process Research facilities provided to the students



#### Software

**MATLAB** 

Sci lab

**PSIM** 

**LABVIEW** 

J-MAG

KEIL

Proteus

SAM

**ECAD** 

Python



#### Hardware

**DFIG** 

WIND Emulator

Transmission Line Model

Twin Rotor MIMO System

Magnetic Levitation System

Programmable Logic Controller

dSPACE

Solar Power System

Wind Generator Power System

Solar Inverter with MPPT







S.No	Subject/ Category	No. of Books	S.No	Subject/ Category	No. of Books
1	Artificial Intelligence	24	10	Electro Magnetic Field Theory	47
2	CAD CAM Robotics	42	11	Electrical Technology	137
3	Control Systems	176	12	General	76
4	Computer Science	217	13	Maths, Physics and Chemistry	60
5	Digital Electronics and Microprocessors	71	14	Network Theory	94
6	Electronics	134	15	Operation Research	37
7	Power Systems	241	16	Electrical Lab	1
8	Power Electronics	58	17	Engineering Drawing	1
9	Electrical Machines	108	18	Research Methodology	1
	Licenteal Machines	100		Total	1525



## **DEPARTMENT LIBRARY (Contd..,)**



## Shodhganga: a reservoir of Indian theses @ INFLIBNET

The Shodhganga@INFLIBNET Centre provides a platform for research students to deposit their Ph.D. theses and make it available to the entire scholarly community in open access.



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## **E-Content Development (inhouse)**



















## **Interactive Sessions (241) with Eminent Personalities**

Mr. Ravi Nemalikanti, Chief Technology Officer, Digital Banking, NCR Corporation, USA



Mr. Divakar Tantravahi, Chairman & CEO, Innominds Software, USA



Dr. Radha Krishna Vishnumolakala **Soft Skill Trainer & Business Coach** 



**Outcomes** 

I.First Floor of Department Building Area: 10,000 Sq.ft

Amount: Rs.2.00Cr

Sponsored & Constructed by: Mrs.P.V.Sudha Krishna Reddy Director, MEIL, Hyderabad

Prof. G V Siva Krishna Rao the then Head is instrumental in the project

II. Students Placements **III. Student Internships** 

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Founder & Chief Executive Officer, Cerium Systems Pvt. Ltd



Mr. Naveen Munjal, **Managing Director,** Hero Electric Vehicles, India



Mr. Inaganti Srinivasa Rao, **Vice President, Technip Energies** 



## 2. Promoting Start-Up Culture



#### I. AY 2023-24 is being observed as START UP YEAR FOR ELECTRICAL ENGINEERS

As part first phase of pitching session held on 31-08-2023

No of start ups participated: 46

No of start ups elevated to next level: 13



Nominated for a Zonal Innovation Challenge "YUKTI Innovation Challenge 2023"

**Title:** "Graphical, Hierarchical and Orthogonal Maximum Power Point Tracking State Charts for Photovoltaic System."

Team Leader: Prof. K. Rama Sudha

Team member: Ms. Venkat Pankaj Lahari Molletinthi

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#### III. Start-Ups at a-Hub TARAMANDAL

#### Outreach



























BRIGHTSIDE

Outreach



TARAMANDAL titled as best emerging Start Up 2023 by HeadStart India



....technologies surrounding stars

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TARAMANDAL is winner of NIDHI-PRAYAS Scheme and working with Paris Peace Forum (4th from INDIA)



Capacity
Enhancement of
Students towards
becoming Employers

Capacity
Enhancement of
Department faculty to
become partners in
indigenization through
R & D

Progressive Plan

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