



BAPUJI EDUCATIONAL ASSOCIATION(R)
BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY,
DAVANAGERE.

ELECTRICAL NEWS

JULY-DECEMBER 2024

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WE LIGHT THE WORLD

MESSAGE FROM HOD'S DESK

We are happy to bring out our department E-Forum Newsletter, which showcases all the activities of the Department. I congratulate team for their continuous effort.



Dr.M. S .NAGARAJ

Program Coordinator



Placement

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VISION

To train globally competent quality students in Electrical Engineering through excellent academic inputs, innovative ideas and team work”

MISSION

M1: To enhance the quality of life of students through Continuous learning & state-of-the-art technical education.

M2: To meet the long term needs of the industry & society.

M3: To inculcate leadership qualities & ethical values

M4: To serve the Community for the socio economic developments.

Program Educational Objectives (PEOs)

PEO1-Successful in identifying, analyzing and solving variety of problems in the field of Electrical & Electronics Engineering.

PEO2-Apply acquired knowledge in solving technological challenges of the industry and society with professional ethics and accountability.

PEO3-Pursue a continual path of professional development along with advanced education and continuing enhancement programs, relevant to their specific career goals.

PEO4-Adapt to emerging technologies and opportunities to work as team on multidisciplinary projects with effective communication skills and leadership qualities

Program Specific Outcomes (PSOs)

PSO1-Ability to analyse power systems that efficiently generate, transmit, distribute and utilize electric power.

PSO2-Able to design, develop and analysis of Modern Electric & Electronics systems and allied interdisciplinary areas using Conventional methods & Modern tools.

PSO3-Aware of the impact of professional engineering solutions in societal, environmental context, professional ethics and be able to communicate effectively.

PROGRAM OUTCOMES

P1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

P2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

P3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

P4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

P5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

P6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

P7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

P8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

P9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

P10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation., make effective

P11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

P12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

ABOUT THE DEPARTMENT

The Department of Electrical & Electronics Engineering was started in the year 1979 with an intake of 40 students. Now the department has academic programme with an intake of 60. Department is duly recognized and accredited By National Board of Accreditation, AICTE, New Delhi and The Institution of Engineers (India), Kolkata.

The Department of Electrical Engineering, which has renowned as well as young and dynamic personalities as faculty, is involved in providing quality education to undergraduate (UG).

LABORATORY FACILITIES

Department as a broad based UG curriculum & the syllabus of the courses are continuously updated and the laboratories modernized to reflect the rapid changes in technology. The department is equipped with the latest experimental and computational facilities meet the curriculum. The total expenditure on Instruments, Equipment's and Computers is Rs.52 Lakhs. The major laboratories in the department are Electronics, Microcontroller, Machines, Control system, Measurement, Power system simulation & High voltage & relay.

DEPARTMENTAL LIBRARY

We have department library with 1567 books with 424 titles. Every year books are added to the library from the forum. Every semester two books are issued to students. Electrical and Electronics Engineering books available in the Central Library with 8685 with 1426 titles.

MAJOR EQUIPMENT'S AND SOFTWARE

Department has many major equipment's. Major equipment's are Digital trainer kits, Power Electronics Modules, 8051 Flash Programmable Microcontroller, Evaluation Board (MCB 51) with interfacing modules, DC and AC Machines sets, Transformers, Electrolytic Tank, Auto-Transformers, Servo Stabilizer, Air-Cooled Rectifier Unit, Phase-Shifting Transformer, HV Testing Transformer, 5-Stage Impulse Voltage Generator, Continuously Variable Auto-Transformer, 60kV HV Testing Transformer, Digital Storage Oscilloscope, HV Rectifier Unit, Computers, UPS, 200kVA diesel generator. Department has Mi-Power software Packages with 6 user, Microcontroller-Keiluvision#3(C51), Lab view with 10 Users, PSPICE Student Version.

FDP/WORKSHOP ATTENDED BY THE FACULTY

SN	Name of Faculty	Type of training (FDP/STTP/OTHER)	Programme Name	Dept. and Institution	Duration	Academic year
1	Dr.Manjunath.H.M	Conference	Enchaning Early Detection of brain aneurysms:A CNN-Driven,real time approach with angiography Imaging	IEEE	2 days	17 th & 18 th December 2024
2	Mrs.Sowmya Anand	Conference	Modelling of hybrid AC/DC Microgrid and power flow analysis	Istanbul Turkiye	3 days	3 rd to 5 th December 2024
3	Mr.Arunkumar.P	FDP ATAL	Power Electronics application in microgrid using AI	Jain New Delhi	6 days	9 th to 14 th December 2024
4	Mr.Karibasavarju.T.S					
5	Dr.Manjunath.H.M					
6	Dr.Basvarjappa.S.R	International Webinar	Cutting edge engineering research	Channa basaweshwara Institute of Technology Gubbi		October-November 2024
7	Dr.Basvarjappa.S.R	Conference	Innovations in communications Electrical and computer engineering	Davangere	2 days	24 th to 25 th October
8	Mr.Karibasavarju.T.S	FDP	Advanced Power Electronics and intelligent optimization techniques for electric vehicles	EEE Avanti institute of engineering and technology	5 th days	25 th to 29 th October
9	Dr.ShivaKumar Swamy G.M	FDP	Empowering Education Through E-Learning and Digital Tools	EEE Tamil Nadu	6 days	21 st to 26 th October
10	Mr.Arunkumar.P	FDP	EV technology Battery Modeling	VVI Engineering and technology Mysuru	6 days	12 th to 17 th August 2024

FDP/WORKSHOP ATTENDED BY THE FACULTY

11	Dr.ShivaKumar Swamy G.M	STTP	Transformative education integrating AI Tools with outcome based learning	EEE Tamil Nadu	7 days	5 th to 11 th August 2024
12	Mrs.Sowmya Anand					
13	Mr Prashanth Kumar.H.K					
14	Mrs.Sowmya Anand	FDP	Automation system design & simulation using automation studio software	New Delhi	1 day	16 th August 2024
15	Mrs.Sowmya Anand	STTP	Research writing funding proposal development and patent Drafting	Vidya Vihar Institute of Technology,Bihar,India and RSP Science Hub,Tamil Nadu	13 days	8 th to 20 th July 2024
16	Mr Prashanth Kumar.H.K	STTP	Research writing funding proposal development and patent Drafting	Vidya Vihar Institute of Technology,Bihar,India and RSP Science Hub,Tamil Nadu	13 days	8 th to 20 th July 2024

FACULTY PAPER PUBLICATION

SL No.	Title of Paper	Name of the author/s	Name of Journal	Year of Publication	Is it listed in UGC care list/scopus/Web of Science/other,mention
1	Northern goshawk optimization for optimal reactive power compensation in photovoltaic low-voltage radial distribution networks	Dr.M.S.Nagaraj	KeAi	2024	scopus
2	An Improved Northern Goshawk Optimization for Optimal Reconfiguration of Modern Electrical Distribution System for Loadability Enhancement	Dr.M.S.Nagaraj	International Journal of Intelligent Engineering & Systems	2024	Scopus
3	Classification of Alzheimer's Disease Using Deep Learning based Edge Detection and Fuzzy Neural Network	Dr.Anjaneya L H	Tujjin Jishu/Journal of Propulsion technology	2024	Scopus
4	Expeditious Diagnosis of Cerebral Aneurysm on MR Brain Angiogram Images Utilizing Soft Computing Techniques	Dr.Anjaneya L H	International Conference on Inventive Computation Technologies	2024	Scopus

5	Assertion of Soil Data Consistency by Detecting and Removing Spatial Outliers Using Iterative Techniques for Precision Agriculture	Dr.Manjunatha H M		2024	Scopus/Web of Science
6	Machine learning- based prediction of lithium-ion battery life cycle for capacity degradation modelling	Dr.Manjunatha H M		2024	Crossref
7	Optimizing Distributed Generation in DC Microgrids:A Comprehensive Study	Dr.Basavarajappa S R	World Journal of Advanced research and reviews	2024	Crossref
8		Dr.Manjunatha H M			
9		Mr.Arun Kumar.P			
10		Mr.Karibasavaraju T. S.			

11	Speed control and characteristics of DC shunt Motor Using Simulink	Dr.Basavarajappa S R	World Journal of Advanced research and reviews	2024	Crossref
12		Dr.Manjunatha H M			
13		Mr.Arun Kumar.P			
14		Mr.Karibasavaraju T. S.			
15	PI-Based direct torque control of PMSM for troque ripple rduction	Mr.Karibasavaraju T. S.	World Journal of Advanced research and reviews	2024	Crossref
16		Dr.Manjunatha H M			
17		Mr.Shadashraiah C			
18		Arun Kumar.P			
19	Agricultural Utility Vehicle with Field Monitoring Using IOT	Dr.Shivakumar Swamy G. M.	IJERT	2024	Crossref

20	IoT based monitoring of Distribution Transformer	Mrs.Shilpa S K	World Journal of Advanced Research and Reviews(WJARR)	2024	CrosRef
21	Auction-Based Single-Sided Bidding Electricity Market: An Alternative to the Bilateral contractual energy trading model in a Grid-Tied Microgrid	Dr.Manjunatha H M	IEEE Access	16-07-1905	scopus/Web of Science
22	A Comprehensive Investigation of DG Integration with DC Microgrid	Mrs.Sowmya Anand	World Journal of Advanced Research and Reviews(WJARR)	2024	CrosRef
23	Solar powered solid waste management system using IoT.	Mrs.Sowmya Anand	World Journal of Advanced Research and Reviews	2024	CrosRef
24	Adaptive fuzzy PID integrated renewable power management system for off grid and on grid conditions	Dr.M.S.Nagaraj	Internal Journal of power electronics and drive systems	2024	UGC/scopus
25	Enhancing Load Frequency Control in a Four-Area Power System Network with an Optimal ANN Controller	Dr.Basavarajappa S R	Theory and Application of Engineering Research	2024	Book chapter Published in International book
26		Dr.M.S.Nagaraj			
27	Anti-Poaching Alaram aystem for valuable Tres	Mrs.Shilpa S K	International Journal of Scienceand Research	2024	

28	Analyzing Line-Line Faults in DC Microgrids through discrete wavelet Transform Techniques	Mr.Prashanth Kumar.H.K	International Journal conference on Smart Power Control and Renewable Energy	2024	IEEE
29	Enhancing Early Detection of Brain Aneurysms: ACNN-Driven, Real-Time Approach with Angiography Imaging	Dr.Manjunatha H M	Proceedings of the International Conference on IoT Based Control Networks and Intelligent Systems	2024	IEEE Xplore

EVENTS ORGANIZED IN DEPARTMENT

Our Electrical branch 3rd semester students has participated in NSS at BIET on 29th August 2024.



Under the banner of electrical forum, following events (Kannadakkagi OndhuNimisha, Remember the picture, Bharatiya Samsruthi) are conducted on 9th November at BIET Davangere.



Google

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Our Electrical branch 5th semester students has visited BHEL at Banglore on 9th December and Shivana samudra Solar Power Generation Plant at Mandya on 10th December 2024.



Electrical Forum Organised an Vidyuth-2024 an interbranch Fest on 6th December 2024 at BIET Davangere.



Parents Meeting for 3rd sem ,5th sem and 7th sem seter Students was organized on 14th December 2024 at BIET Davangere.



Under Electrical forum Alumini Meet of Batch 1999 was organized on 21st December 2024 at BIET Davangere.



Under Electrical forum Alumini Meet of Batch 1985-1995 was organized on 28th December 2024 at BIET Davangere.



PLACEMENT

Sl.No	Name Of The Student	Company Placed
1	LIKITH C PUJJAR	CODE YOUNG
2	HANNI VINAYAKA	TCS/NINJA
3	DAVANA	TCS/NINJA

