



B.M.S COLLEGE OF ENGINEERING, BENGALURU-19
(Autonomous Institute, Affiliated To VTU)
Department of Electrical and Electronics Engineering

Activities in the month of January 2022

1. **1st January 2022: Dr. Umavathi M** Faculty, Dept.of EEE, published a paper titled “Analysis of Single-Phase Inverter for Avionics System”. In: Smys S., Balas V.E., Palanisamy R. (eds) Inventive Computation and Information Technologies. Lecture Notes in Networks and Systems, vol 336. Springer, Singapore.https://doi.org/10.1007/978-981-16-6723-7_49. which is available online from 01/01/2022.
2. **2nd January 2022: Dr Venkatesh Boddapati** has published a paper on “Experimental Setup of Smart E-Vehicle Charging Station using IOT Technology “ in 2021 IEEE International Conference on Mobile Networks and Wireless Communications (ICMNWC), Which is available online from 2/01/2022.
3. **5th January 2022:- Dr. Prema V.**, faculty, Dept. of EEE, published an article titled "Critical Review of Data, Models and Performance Metrics for Wind and Solar Power Forecast," in IEEE Access (Q2 Journal), vol. 10, pp. 667-688, 2022, doi: 10.1109/ACCESS.2021.3137419
4. **7th January 2022: Dr. Venkata Madhava Ram Tatabhatla** delivered a technical talk on “IoT in Energy Sector” at *Infinity Management and Engineering College, Sagar, MP* for Faculty Development Program on Cloud Computing and Big Data Analytics.
5. **8th January 2022:- Dr. Prema V.**, faculty, Dept. of EEE, published a book chapter titled “User Interactive GUI for Integrated Design of PV Systems’, Chapter 9, Intelligent Renewable Energy Systems, Wiley- Scrivener Publishing LLC, Print ISBN:9781119786276 |Online ISBN:9781119786306 |DOI:10.1002/9781119786306
6. **15th January 2022: Dr. Chandasree Das** has published a paper in Materials today: Proceedings titled “Electrical, Raman, and Morphological Studies on Si₂₀ Te₇₄Sn₆ Chalcogenide Glass” which is available online from 15 January 2022.
7. **20th January 2022: Dr. R.S. Geetha** delivered a technical talk on “VSC based transmission systems: Overview and research opportunities' ', at SIT, Tumakuru on 20/1/2022, during FDP on “AI applications to Power systems' ', 17th to 22nd Jan 2022.
8. **21st January 2022: Dr. Prema V.**, faculty, Dept. of EEE delivered a technical talk on “Applications of Machine Learning in Solar PV systems”, at Siddaganga Institute of Technology, Tumakuru during FDP on “AI applications to Power systems' ', 17th to 22nd Jan 2022.
9. **27th January 2022: Dr.Usha. A.**, Faculty from Dept.of EEE published a paper on “Design and Development of Smart Charger for Automotive



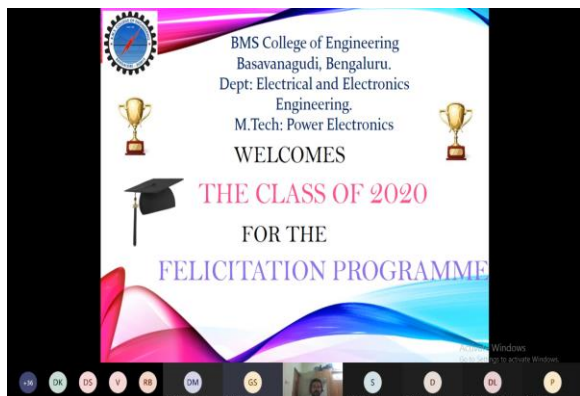
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Application”inspringer.

<https://link.springer.com/book/9789811667244>.

Activities in the month of February 2022

1. **25th February 2022, Dr. Prema V & Dr. Chethan Raj** Coordinated Felicitation ceremony for 2020 batch organized by the **Department of Electrical and Electronics Engineering** for the M.Tech:Power Electronics and BE to enhance the morale of the little modernites and give recognition to their commendable academic achievements.More than 60 students and 23 faculty attended the ceremony.



2. **26th February 2022 , Dr. Umavathi M & Dr.Chethan Raj** Coordinated Felicitation ceremony for 2021 batch organized by the **Department of Electrical and Electronics Engineering** , for M.Tech Power Electronics and B.E., students to enhance the morale of the little

modernites and give recognition to their commendable academic achievements.More than 80 students and 25 faculty attended the ceremony.



3.25th February 2022: Prof Chaitanya.L,faculty department of EEE co-authored a paper titled “ Synthetic battery attribute generation to surmount data scarcity using auto-correlation mechanism “ with Janamejaya Channegowda and Vinayak Raj Urs which is published online in International journal of Energy Research WILEY, DOI:10:1002/er.7784.(Q1 Journal).



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Activities in the month of March 2022

1. **March 10th ,2022:Dr. C.Lakshminarayana Professor**, Department of EEE, delivered a webinar on energy conversion at government Engineering college Ramanagar.
2. **March 11th , 2022:** Dr. Prema V., Associate Professor, Department of EEE was invited for BoS Meeting at RV College of Engineering, Bangalore.
3. **March 12th , 2022 :** Dr.A.N.Nagashree, HOD E&E and 5th sem EEE project students Sangam Kumar,Abyan Abera Shiferaw, Aditya Kumar Mondal Nishit Kumar, and Pratheeksha T.R filed a patent application titled “A SYSTEM AND A METHOD FOR A PARKING SPOT INDICATOR” bearing application no. 202241013159.
4. **March 12th 2022:** Dr. [Usha A](#) Professor from the EEE department conducted a COMPREHENSIVE VIVA-VOCE of Miss Anisa Aftab on the topic “Design, Simulation and Development of a Smart Sensor for Brain Controlled Robotic Arm”.
5. **March 23rd 2022:** Prof Chaitanya.L has delivered a session on Digital Electronics during one week student training Program on “Virtual Labs “

conducted by BMSCE in association with virtual Lab @ NITK surathkal , Mangalore.

6. **March 26th 2022:** Dr. Chandasree Das has published a paper with research scholar Sutapa Baidyakar in Materials Today Proceedings on “Numerical simulations on a-Si:H/SnS/ZnSe based solar cells” which is available online from 26th March 2022.
7. **March 28th 2022:** Dr. Prema V., Associate Professor, Department of EEE was invited for Industry-Academia Board Meeting at Vidyavardhaka College of Engineering, Mysore



6. Dept of EEE and Dept of EIE in collaboration with IEEE SSIT, PELS, & IES Bangalore Chapters, EEE Association and ISA BMSCE Student Section conducted Two week value added course on “Modelling,Simulation,



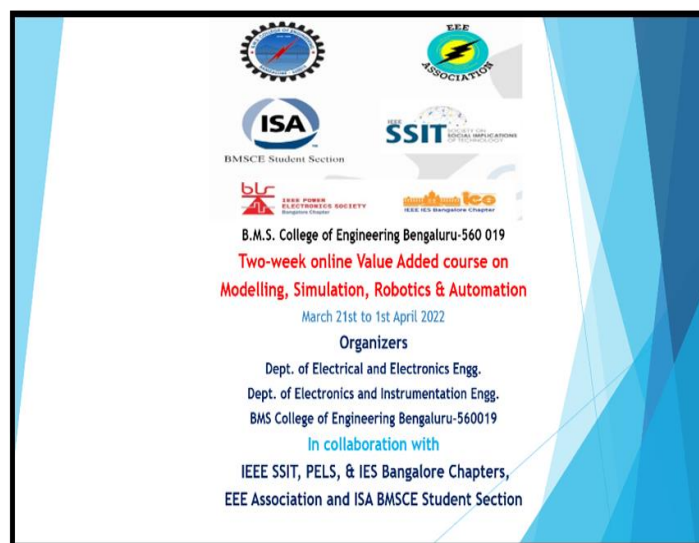
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Robotics & Automation” during 21st March to 1st April 2022 for B.M.S.C.E. UG,PG and external participants. The following sessions were handled by both inhouse and external resource persons:

- a. **Inaugural address:** Dr. K.Uma Rao, Prof (Retd), Dept. of EEE, RVCE.
- b. **Introduction to MATLAB:** Dr. Dipesh Kumar, Asst, Prof, Dept. of EEE, BMSCE
- c. **Mathematical modeling using MATLAB /Simulink:** Dr. R.S. Geetha, Prof., Dept. of EEE, BMSCE
- d. **Simulink modeling applications:** Dr. Dipesh Kumar, Asst. Prof., Dept. of EEE, BMSCE
- e. **Modeling of Power Electronic Converters:** Prof. Divya S, Asst. Prof., Dept. of EEE, BMSCE
- f. **Introduction to Control Systems toolbox:** Dr. Chethan Raj D, Asst, Prof, Dept. of EEE, BMSCE;
Dr. Santosh R Desai, Professor and Head,

Dept of EIE, BMSCE
- g. **Introduction to Robotics:** Dr. Jyoti Bali,Asst. Professor, Dept of Automation & Robotics, KLE Technological University Hubballi
- h. **Robot Kinematics and Dynamics:** Prof. Amit Talli, Asst.professor, Dept. of Automation & Robotics, KLE Technological University

- i. **Robot Kinematics using Robo Analyser:** Prof. Chaitanya.L, Asst. Professor, Dept of EEE, BMSCE.
- j. **Introduction to Fuzzy logic controllers:** Dr. Prema V. Assoc. Professor, Dept of EEE, BMSCE.
- k. **Introduction to DSP tool box:** Dr. Veena N Hegde, Professor, Dept of EIE, BMSCE
- l. **Introduction to AI techniques in power Engineering:** Dr. Lakshminarayana C, Prof , Dept of EEE, BMSCE.
- m. **Robot Sensors and Actuators:** Dr. Veena N Hegde, Professor, Dept of EIE, BMSCE
- n. **Robot Control System:** Dr. Santosh R Desai, Professor and Head, Dept of EIE, BMSCE
- o. **Renewable Energy Systems:** Dr.Madhava Ram Asst. Professor, Dept of EEE, BMSCE.





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7. Department of Electrical and Electronics Engineering, BMSCE, Bangalore were fortunate to host Prof. Chetan Singh Solanki, Professor from IIT Bombay, Brand Ambassador of Solar Energy, Govt of MP and popularly known as The Solar Man of India, on 28th March 2022. He lives in his solar bus and has pledged not to go home until 11 years of his yatra (2020-2030) to create Energy Swaraj as Public Movement.

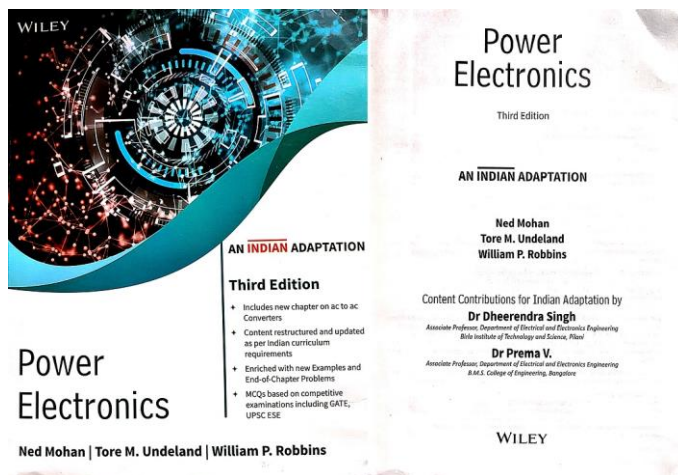


During his address to the students and faculty, he gave a message and awareness to save our planet and to switch to 100% solar energy to reduce the emission of carbon dioxide. Prof. Solanki also spoke about the issues of Global warming and Climate change throughout the world. He stressed on the solution for energy consumption as “AMG” route wherein A stands for avoid use of energy, M stands for minimize use of energy and G stands for generation.

More than two hundred members (faculty and students) attended the talk followed by the demonstration of the Energy Swaraj Yatra Bus.

Activities in the month of April 2022

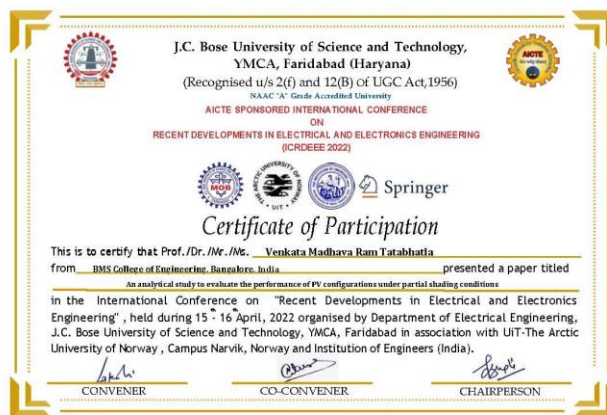
1. **5th April 2022 : Dr. Prema V,** Faculty, Department of Electrical & Electronics Engineering co-authored the book on Indian Adaptation of Power Electronics by Ned Mohan, Tore M. Undeland, William P. Robbins and Dheerendra Singh published by Wiley India





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2. **08th April ,2022 : Prof Chaitanya.L**,faculty department of EEE co-authored and presented a paper titled “RGB Camera Based Object Detection and Object Coordinate Extraction “ with UG students Apoorva M, Nikhil Muralidhar Shanbhogue, Samarth Shreepad Hegde and Yogesh P Rao in 2022 IEEE 7th International conference for Convergence in Technology (I2CT) Pune, India. Apr 07-09, 2022.



3. **15th April 2022: Dr. Venkata Madhava Ram Tatabhatla**, Assistant Professor in the Department of Electrical and Electronics Engineering, has co-authored and presented a conference article titled “**An analytical study to evaluate the performance of PV configurations under partial shading conditions**” in International Conference on "Recent Developments in Electrical and Electronics Engineering", held during 15 - 16 April, 2022 organized by Department of Electrical Engineering, J.C. Bose University of Science and Technology, YMCA, Faridabad in association with UiT-The Arctic University of Norway , Campus Narvik, Norway and Institution of Engineers (India).

4. **22nd April 2022:**The Department of Electrical and Electronics Engineering, B M S College of Engineering, Bengaluru had organized an Industrial visit to Boruka Power Plant,Mysore on 24th April, 2022 for 6th semester (EEE) Students.



5. **23rd April 2022:** The following papers were presented (Online) by the faculty and students of Department of Electrical &



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Electronics Engineering at the mini
symposium on Effective Practices in
Teaching-Learning organized

By Indo Universal Collaboration for
Engineering Education (IUCEE)

1. Vedika K Prasad, Deekshith Pejawar C, Amogh P Rao, **Prema V**, "Integration of Virtual Reality with 3D Modeled Virtual Labs for Advanced Learning"
2. **Prema V, Soniya Agrawal, Divya S, Chaitanya L**, "Implementation of Open-Ended Lab Assessment for Enhanced Learning Experience"

30th April 2022: Prof. Divya S, Dr. R.S. Geetha and students Varsha M, Stephen J presented a paper titled "DESIGN AND DEVELOPMENT OF AN ELECTRICAL POWER SYSTEM FOR A 3U CUBESAT" in the International Conference on Small Satellites (ICSS - 2022) organized by Lovely Professional University, Punjab, India on April 29 - 30, 2022.

Activities in the month of May 2022

1. **08 May 2022 : Dr. UMAVATHI M**, Assistant Professor in the department of Electrical and Electronics Engineering invited as a Technical Reviewer and a committee member in the International E- Conference ICBELC 2022 (Virtual/Online), Seoul, South Korea.
2. **17th May 2022: Prof Chaitanya.L**, Assistant Professor, department of

EEE co-authored a paper titled "An attention-based synthetic battery data augmentation technique to overcome limited dataset challenges" with Channegowda J, Maiya V, Joshi N, Raj Urs V, which is published online in Energy Storage, Wiley. 2022; e10315 .doi:10.1002/est.2.354 .

3. **18 May 2022: Shilpashree, S., Geetha, R.S.** published a book chapter titled "Cell Balancing and State of Charge Estimation of Lithium-Ion Cells for Electric Vehicle Applications" in Advances in Sustainability Science and Technology. Springer, Singapore. https://doi.org/10.1007/978-981-16-9033-4_41, pp 559–573
4. **18 May 2022: T. N. Dishashree, A. Usha, G. Kubendran, Bhoopendra Kumar Singh, Vinod Chippalkatti** published a book chapter titled "Design and Implementation of 165 W Current-Fed Push–Pull Converter for Military and Space Applications" in Advances in Sustainability Science and Technology. Springer, Singapore. DOI: 10.1007/978-981-16-9033-4_10, pp 121-134

Activities in the month of June 2022

1. **2nd -3rd June 2022: Dr. Chandasree Das** attended a workshop by SERB at Doon University Dehradun on "Professional Advancement



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Program” under SERB Power Grant.

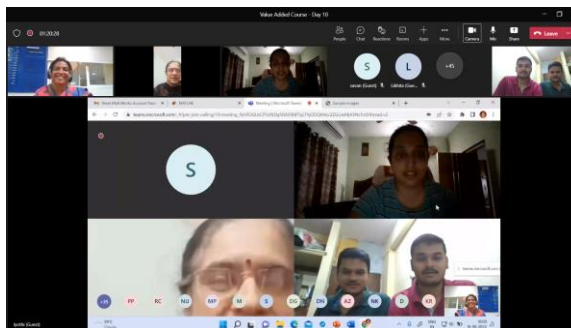


2. **6th June 2022: Dr.Venkatesh Boddapati** , Faculty from Department of Electrical and Electronics Engineering published a paper titled **“Design and prospective assessment of a hybrid energy-based Electric Vehicle Charging Station”** in Sustainable Energy Technology assessment journal. Published by Elsevier and indexed in SCI with 5.353 impact factor.
3. **6th June to 18th June:** The two weeks value added course on **“VLSI, Verilog and Image processing”** was organized for UG, PG and external participants by the department of Electrical and Electronics Engineering in collaboration with EEE Association bearing faculty members **Dr. V. Champa** and **Dr. Venkata Madhava Ram Tatabhatla** as co-ordinators, which had 64 participants. The following sessions were handled by both inhouse and external resource persons:

The first week of the course covered the



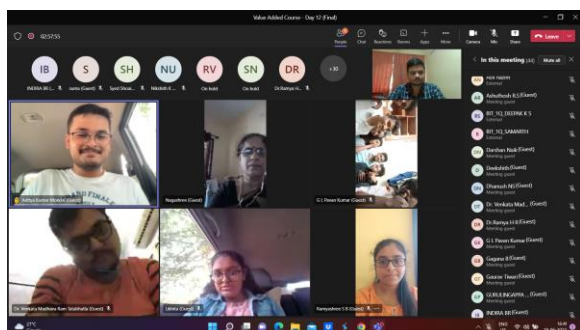
various topics from Verilog and VLSI. Starting with the **“Fundamentals of VLSI and Verilog”** by Dr A. N. Nagashree and **“Prerequisites for Verilog”** by Dr V Champa. The course went ahead with in-depth topics covered by Dr MS Suma on **“ASIC Design Flow”**, **“Verilog HDL”**, **“Finite State Machine”** and **“Introduction to Linux”**. The topic on **“Implementation of Design using FPGA Board”** was conducted by Dr. S. Moorthi from NIT Trichy and the week concluded by the lecture on **“Physical 3-D Design”** by Mr Chandrasekhar V Patil, an industry expert from CISCO Systems, Bangalore which helped students gain an insight of how to practically work on VLSI.





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The second week began with the basics of image processing on the topic of **“Image Processing Introduction and Representation”** by Dr. Pawan Dubey from MITS, Gwalior it helped the students to have a basic idea of Image processing and its usage. The next day a session on **“Spatial Domain and Frequency Domain”** by Dr Nidhi Saxena from MITS, Gwalior was conducted which helped students in understanding the various aspects of spatial and frequency domain used in image processing.



The following was a session by an industry expert Dr Madhura Shivaraju from Infosys technologies, London on **“Image Restoration and Image Compression”** and a session by Dr KS Venkatesh from IIT Kanpur on **“Image Enhancement”** where he also showcased from of his brilliant work on enhancing videos in foggy areas. The next was a session on **“Edge Detection Algorithm in Image Processing”** by Dr Jyoti S Nayak followed by a session on **“Object Detection”** by Smt. Namratha M. Then a session on **“AI and ML using Image Processing”** conducted by Dr Seemanthini K brought light on the practical aspects of Image Processing. The final day’s

sessions were concluded by Dr Shubhi Kansal from MITS, Gwalior on the topic of **“Image Processing in Industry”** and course ended with **“Image Processing Techniques in Electrical Engineering”** by Dr. Venkata Madhav Ram Tatabhatla followed by a validictory.



11th June 2022: Dr. Chandasree Das has organized a tech talk on **“Dynamic Modelling of Inverter Interfaced Generations”** delivered by Dr. Amritpal Singh, Director Enerzinx India Pvt. Ltd., in association with IEEE PES Bangalore Chapter and BMSCE IEEE PES Student Branch Chapter.



17th June 2022: Dr. Prema V, Associate Professor, Department of EEE along with **Dr. Anil Chandra A R** and **Dr. Suhas B.G**,



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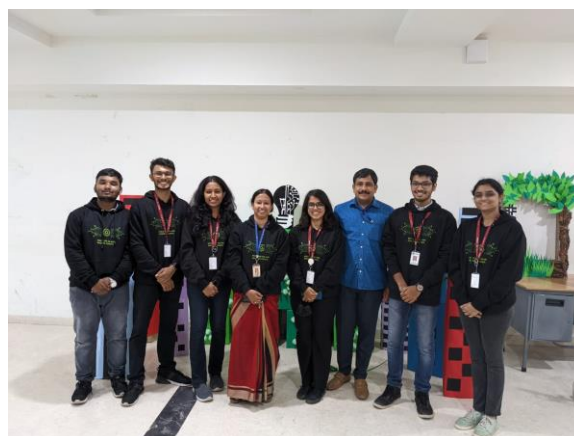
Assistant professors of Department of Mechanical Engineering, PG students Manoj Kumar S and Deepak Sagar B S, published a paper titled “Modelling and Simulation of Bifurcated Winding Induction Generator using 3DEXPERIENCE”, at IEEE 4th Global Power, Energy and Communication Conference (**IEEE GPECOM 2022**), **Cappadocia, Turkey**, June 14-17 2022.



4. **18th June 2022: Dr. Umavathi M**, Assistant Professor in the Department of Electrical & Electronics Engineering Published a Journal Paper in Elsevier, Materials today : Proceedings, Titled : **“Development of a PMSM Motor Field-Oriented Control Algorithm for Electrical Vehicles”**.
<https://doi.org/10.1016/j.matpr.2022.06.080>

5. **22nd June 2022:** BMSCE IEEE PELS & IES Student Branch Chapter was Inaugurated on the 22nd of June 2022, Wednesday.

6. **23rd June 2022: Dr. Chandasree Das** Inaugurated PES Day 2022 celebration at BMSCE Campus organized by BMSCE IEEE PES Student Branch Chapter.



7. **23rd June 2022 :Dr. Umavathi M**, Assistant Professor in the department of Electrical and Electronics Engineering published a Journal paper indexed in Scopus (Elsevier) Materialstoday : Proceedings Titled: **“Minimum device usages of Field Programmable Gate Array**



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(FPGA) verification of multilevel PWM inverter drive generation"
<https://doi.org/10.1016/j.matpr.2022.06.204>

8. **25th June 2022: Dr. Prema V and Ms. Chaitanya L**, Faculties of department of EEE were invited as chief guests for the inaugural function of VVCE IEEE PELS Student Branch Chapter and the judge for the project expo organized on the occasion of PELS Day celebration at Vidyavardhaka College of Engineering, Mysuru



The following projects were awarded prizes:



Activities in the month of July 2022

1. **9th July 2022: Department of Electrical and Electronics Engineering**, organized

ANVESH Final Year UG Project Competition, Sponsored by Centum Electronics Limited & ROHM Semiconductors India Pvt Ltd.

B.M.S.College of Engineering Department of Electrical & Electronics Engineering					
BATCH	STUDENT NAME	USN	Title of the project	GUIDE NAME	Prize
B17	NAMAN Y	1BM18EE032	Ranger - An Autonomous Electric Vehicle	Dr.C.Lakshminarayana	I
	ASHISH TIWARI	1BM18EE010			
	PRASHANTH M S	1BM18EE038			
	SHASHANK SINGH	1BM18EE051			
B1	H P SUJAY	1BM18EE022	Design of Battery Management system for LFP	Dr.Umavathi M	II
	KEERTHI VARDHAN B	1BM18EE026			
	PUNEETH V	1BM18EE044			
	STEPHEN J	1BM18EE057			
B13	PRATEEK P BHAT	1BM18EE039	AI based blind assistance system	Dr.A.N.Nagashree	III
	AADARSH S BHAT	1BM18EE001			
	SOMSHEKAR M	1BM18EE056			
	DARRYL SAM GRAS	1BM18EE016			
B4	MEGHA K S	1BM18EE030	Solar Power Generation Forecasting Using AI Techniques	Dr.Padmavathi K	Consolation
	KRUTHIKA R	1BM18EE028			
	DIVYA K M	1BM19EE401			
	ARPITHA K	1BM18EE009			
B8	SANTHOSH KUMAR S K	1BM18EE047	Design and Implementation of Converters for an Islanded DC Microgrid	Prof.Divys S	Consolation
	VAMSHI KIRAN M	1BM18EE064			
	SUHAS G S	1BM18EE058			
	BELURIAH M R	1BM18EE012			
B3	SHREYA ARYA	1BM18EE053	Installing SCADA system for Smart PV Panel	Dr.C.Lakshminarayana	Consolation
	SHASHANK K R	1BM18EE050			
	BHAVYA G P	1BM19EE400			

HOD, EEE

2. **16th July 2022 : Department of Electrical and Electronics Engineering**, organized the alumni meet, *Sammilana 2022*, Venue:



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Auditorium -2, Platinum Jubilee
Academic Block, BMSCE.



3. 28th July 2022: Department of Electrical and Electronics Engineering, organized

International Conference on Power, Control and Sustainable Energy Systems ICPCSES-2022 in association with AARHUS University, Denmark from 28th July to 30th July 2022. Dr.G.Narayanan, from IISc, Bangalore was the Chief Guest for the conference.



The following papers were presented during the conference:

- 1. Dr. C. Lakshminarayana**, Professor, Department of EEE along with research scholar, Smt. Suneetha M N, published a paper titled, “Design of Parameters of Buck Converter Integrated to a Hybrid DC Micro Grid using Genetic Algorithm”.
- 2. Dr. A N Nagashree**, Associate Professor and Head, Department of EEE along with PG student, Nikhil Kumar, and guides Bhoopendra Kumar Singh, Santosh B L, Prakash Guthi, Centum Electronics, published a paper titled “Design and Implementation of Dual Output Forward Converter to Power-up Digital Unit for Space Application”.
- 3. Dr. A N Nagashree**, Associate Professor and Head, Department of EEE along with research scholar, Shilpa, published a paper titled “Effect, analysis and assessment of electricity usage pattern in an



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educational institute during COVID-19 pandemic”.

4. **Dr. V Champa**, Associate Professor, and **Dr. Prema V**, Associate Professor, along with research scholar Manali Raman and Industry person, Priya Ranjan Mishra A, BelBird Technologies published a paper titled, “Deep Learning Model for the Prediction of Remaining Useful Life of Lithium Ion Batteries”.
5. **Dr. V Champa**, Associate Professor, along with PG student Guruprasad Naik G and Industry person, R Harshavardhan Reddy, Rohm Semiconductors, published a paper titled, “Development and Simulation of 48V Li-ion Battery management system for Electric vehicles”.
6. **Dr. A Usha**, Associate Professor, Department of EEE along with research scholar K. Lokeshwara Rao and co - guide Raghunatha R, Professor, Dept. of EEE, BNMIT published a paper titled “Investigations on Influence of Ground Impedance on the Interconnected Three phase Four wire Balanced and Unbalanced Distribution System”. This also got the Best paper award.
7. **Dr. A Usha**, Associate Professor, Department of EEE along with PG student Shamanth Y, Industry persons, Pradeep S, Nagaraju T K, B K Singh, and Vinod chippalkatti, CENTUM Electronics Ltd published a paper titled “Design and Implementation of Triple Output Flyback Converter with Current Mode Control for Space Applications”.
8. **Dr. A Usha**, Associate Professor, Department of EEE along with PG student Harikishan and Industry person Priya Ranjan Mishra, BelBird Technologies, published a paper titled “Design and Implementation of a Dual Active Bridge Converter for Battery Charging Application”. Best paper award.
9. **Dr. R S Geetha**, Professor, Department of EEE along with PG student, Shubham and Industry person Priya Ranjan Mishra, BelBird Technologies published a paper titled “Optimal Design and Comparative Analysis of Different Bi-Directional DC-DC Converters for Energy Storage Applications”.
10. **Dr. R S Geetha**, Professor, Department of EEE along with PG student Abhishek, published a paper titled “Performance Analysis of Boost and Interleaved Boost Converter with A Novel Switching Technique”.
11. **Dr. R S Geetha**, Professor, Department of EEE along with research scholar Smt. K R PUSHPA and faculty PES University published a paper titled “PV integrated DC-DC converter and



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Inverter topologies for grid tied/standalone system”.

12. Dr. Prema V, Associate Professor, Department of EEE along with PG student Manoj Kumar S, published a paper titled “Design and Simulation of Back to Back Converter for Bifurcated Winding Induction Generator”.

13. Dr. B. Venkatesh, Assistant Professor, Department of EEE along with PG student K M Ankush, published a paper titled “Design Simulation Comparative Study And Implementation of SEPIC And CUK Converter For Solar Powered Electric Vehicle Battery Charging Application”.

14. Prof. Divya S, Assistant Professor, Department of EEE along with UG students, published a paper titled “Design, Modelling and Simulation of Traditional DC - DC Boost Converter and Interleaved DC - DC Boost Converter”.

15. Dr. D B Prakash, Assistant Professor, Department of EEE along with PG student, B Rakesh, published a paper titled “Design and Implementation of Forward-Boost Hybrid Converter for Solar Powered Electric Vehicle Charging Application”.

16. Dr. Dipesh Kumar, Assistant Professor, Department of EEE along with UG students, Ahir Jay Satish,

Gourav Kumar Patel, Pathak Krutarth Dhimant, Prajwal S C, presented a paper titled, “SMART IRRIGATION SYSTEM USING AGRIBOT”.

4. **28th July 2022:** Dr. B Venkatesh, Prof. Divya S and Prof. Chaitanya L, Assistant Professor, Department of EEE, authored “A Text Book on Basic Electrical Engineering” bearing ISBN: 978-81-940490-1-2. This book was released during the International Conference on Power, Control and Sustainable Energy Systems ICPCSES-2022 by Dr.G.Narayanan, from IISc, Bangalore.



5. **30th July 2022: Department of Electrical and Electronics Engineering**, organized the valedictory function of the International Conference on Power, Control and Sustainable Energy Systems ICPCSES-2022 in association with AARHUS University, Denmark. Prof. Joseph. M. Guerrero from the Aalborg



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University, Denmark was the chief guest for the function.



had organized an Industrial visit to Bosch Global Software Technologies, Bangalore on 24th April, 2022 for 2nd semester, M. Tech Power Electronics students.



Activities in the month of September 2022

5th September 2022: Dr. UMAVATHI M, Assistant professor in the department of EEE, received the National level 'Inspiring Professor award 2022' sponsored by MSME, Chennai.



23rd September 2022: The Department of Electrical and Electronics Engineering, B M S College of Engineering, Bengaluru

24th September 2022: In association with EEEA and IEEE, SSIT, Bangalore Chapter, the Department of Electrical and Electronics Engineering, B. M. S. College of Engineering, Bengaluru has organized an extension lecture on the topics Automotive - Electronics Product Development Life Cycle and Thermal Engineering in ECU Design which was held on 24th September 2022 at B. S. N Hall, P. G. Block during 10:00 AM to 1:00 PM.

The resource persons to this extension lecture were Dhananjay Papanna and Deepesh Rao for the topic Automotive - Electronics Product Development Life Cycle and Santhoshkumar Y P G and Deepesh Rao delivered a lecture on Thermal Engineering in ECU Design. All the resource persons were associated with Bosch Global Software Technologies, Bangalore

50 students from various M. Tech streams had attended this extension lecture and this event was co-ordinated by Dr. Venkatesh



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Boddapati and Dr. Venkata Madhava Ram Tatabhatla, Assistant Professors, Department of Electrical and Electronics Engineering, B. M. S. College of Engineering, Bengaluru



Activities in the month of October 2022



19th to 28th September 2022: A workshop titled “Know your power devices, Types ,Characteristics and User Guildelines” was organized by Department of EEE in collaboration with IEEE PELS&IES Bangalore Chapter, BMSCE IEEE PELA-IES SBC, IEEE SSIT, BMSCE PES and Sensor council and EE Association on 19 th -22nd and 27th -28 th September 2022.

13th October 2022: Dr. Chandasree Das has delivered an invited talk on “Phase Change Memory and Chalcogenide Glasses: A brief overview” in an FDP on “Hybrid Materials for Multifunctional Applications” organized by Department of Physics, BMSIT & M.



15th October 2022 : Dr.UMAVATHI M along with PG student Latha G, Published a research paper in UGC-Approved Group ‘II’ Journal, Paper titled : “Design and Implementation of Digitally Controlled Cooler Drive Inverter for Temperature Control of Sterling Based Cryocooler” Zeichen Journal vol.08, issue 10,2022 ,ISSN NO.0932-4747,Page No: 121-135, DOI:15.10089.ZJ.2020.V08I10.285311.2981.



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15th October 2022: The Department of Electrical and Electronics Engineering, B M S College of Engineering, Bengaluru had organized an Expert Lecture on “Modeling and Simulation of BLDC motor” on 15th October, 2022.

Activities in the month of November 2022

3rd, 4th and 5th Nov 2022: Inauguration of BMSCE IEEE SSIT student branch chapter and also 50th anniversary IEEE SSIT Symposium on "Sustainable Technologies for Health Care and Environmental Issues" was conducted.



4th & 5th November 2022: Dr. Chandasree Das conducted Young Researcher's Meet 2022 at BMSCE. Which is a Flagship event of IEEE PES Bangalore Chapter. The event

is conducted under the umbrella of BMSCE IEEE PES and Sensors Council Student Branch Chapter.



10th November 2022: Industry visit was organized for 5th Semester Electrical and Electronics students to MADHAVAMANTRI MINI HYDEL Power Station. Hemmige Village MYSORE District. From this visit, 75 students of 5th semester got the idea of electrical power generation, transmission distribution and also get familiar with HydroPower Plant, types of turbines.



11th November 2022: Industry visit was organized for 3rd Semester Electrical and Electronics students to T D Power Systems Limited, Dobbaspet, Bengaluru. From this visit, 75 students of 3rd semester got the idea of manufacturing industry working.



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11th November 2022: Dr. Prema V., Associate Professor in the Department of Electrical & Electronics attended All India Sub-committee meeting of IEEE Power Electronics Society at Hyderabad during 11th and 12th November 2022



19th November 2022: Department of Electrical & Electronics in association with

EEE Association, IEEE PELS & IES SBC and IEEE SSIT SBC, BMSCE conducted an expert lecture of ‘Design of MOSFET Gate Drivers’ by Dr. Shelas Sathyan, Professor, NIT, Trichy



21st November 2022: Dr. Prema V., Associate Professor in the Department of Electrical & Electronics and Mr. Deepak Sagar, Post graduate student published a research paper titled, ‘Single Switch Controlled Single Phase Induction Motor’ in the IEEE NKCon-2022 Flagship International Conference of IEEE North Karnataka Subsection in association with IEEE Bangalore Section and IEEE ITS hosted by BLDEA's V. P. Dr. P.G. Halakatti College of Engineering and Technology, Vijayapur, Karnataka, India

23rd November 2022: Dr. Prema V, Associate Professor in the Department of Electrical & Electronics delivered an invited talk on “Ideation and Problem Solving” at The Oxford College of Engineering, Bangalore



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25th and 26th November 2022:
PHASESHIFT 2022: The Department of Electrical and Electronics Engineering conducted a total of six events during Phase shift 2022 that includes three events, two workshops and one webinar.

22nd, November 2022: A webinar on EV REVOLUTION was delivered by Nitish Kumar, Transportation specialist at Tata Elxsi. The event gave everyone a wonderful insight about the working of electric vehicles.

The EEE department had collaborated with MyCaptain and conducted two workshops on DIGITAL MARKETING & UI/UX. The resource persons were Vishnu Prasad and Sharanya from MyCaptain. Their hands-on workshop gave students a very good insight on those two topics.

Apart from these workshops and talks, the EEE department conducted three fun events. **MINI MANIA** was an all day event on 25th and 26th November 2022 where the organizers built games made of Arduino and allowed the participants to play, depending on the time consumed the winner was finalized.

BOB THE CIRCUIT BUILDER was the flagship event of the department in which eventually the participants had to rig up the

circuit in the final round. The team that rigged up the circuit fastest, without errors were declared the winners.

BIG DADDY was a complete auction based event where the participants were given questions and had to bid some fake currency to answer the question. The team having the maximum currency at the end of the game was declared the winners.

Overall EEE Department had got around 400+ registrations from all the events it conducted.

Mini Mania had a prize pool of Rs.2500, BOB the circuit builder had a prize pool of Rs.3000 and Big Daddy had a prize pool of Rs.2000.





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The Department of Electrical and Electronics Engineering also secured First Place in the Project Stall Exhibition during the International Annual Technical Symposium, Phase Shift 2022 held at BMSCE on 25th and 26th November 2022.





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Activities in the month of December 2022



3rd December 2022: The talk was organized on “Career Guidance on Higher Education, Professional, Entrepreneur Career Opportunities in Sustainable Technologies” by **BMSCE IEEE SSIT student branch** in collaboration with **IEEE SSIT Bangalore Chapter** and **BMSCE Institution’s Invocation council (IIC)** on 3rd December 2022 at BSN hall, PG block, BMSCE.



8th December 2022: Dr. Chandasree Das has received Domain Scholar Certificate from NPTEL/Swayam in the Domain of Power System and Power Electronics by successfully completing all the requirements by NPTEL.

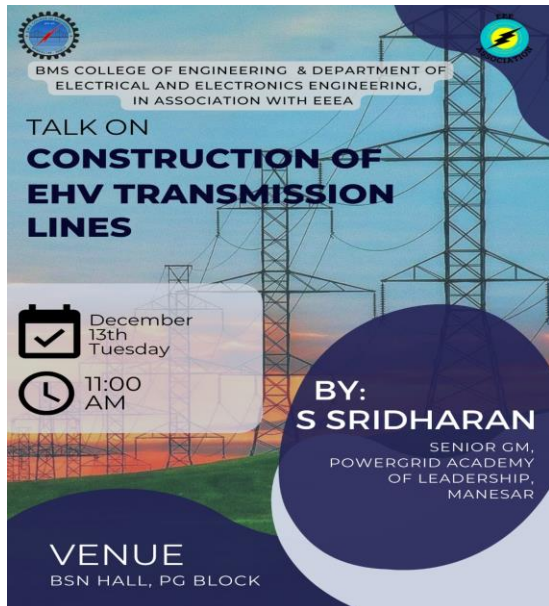
28th November 2022: Department of Electrical and Electronics Engineering conducted orientation program for First Year new batch at 10 AM in BSN hall.





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13th December 2022: Department EEE in association with EEEA organized a talk on “Construction of EHV Transmission Lines”, on 13th December, 2022 Tuesday, at 11AM, by Mr.Sridharan, GM, Power Grid.



15th December 2022: BMSCE IEEE SSIT student chapter hosted a debate “VERBATTLE” on the topic “Is AI more dangerous than nukes”? at Auditorium 2, PJ block on 15th December 2022.



17th December 2022: On the occasion of 9th Annual Alumni Day -2022, the Department of EEE organized an Open House for all the alumni. A total of 44 Alumni graced the event.



18th Dec 2022: Nethravathi.S. Asst. Prof, EEE is a co-author of the paper titled "Hybrid Electric Vehicle Charging Station Design - A Case Study" presented at 22nd National power System Conference NPSC 2022 hosted at the Indian Institute of Technology Delhi.

20th Dec 2022: Institution Innovation Council (IIC) and CIIE in collaboration with Department of Computer Applications and Department of Management Studies and Research Centre organized a distinguished talk on ‘Riding Innovation Wave with IPR’ by Mr. Naveen Lakkur, Founder and Chief



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innovation coach at Institute of Inspiring Innovation on 20th December 2022 at Auditorium 2 from 11.30 AM to 1.30 PM

18th Dec 2022: Nethravathi.S. Asst. Prof, EEE is a co-author of the paper titled "Hybrid Electric Vehicle Charging Station Design - A Case Study" presented at 22nd National power System Conference NPSC 2022 hosted at the Indian Institute of Technology Delhi.

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22nd December 2022: Dr. Prema V, Associate Professor, Dept. of EEE was invited as Guest of Honour for the inauguration of IEEE PELS & IES Joint Student Branch Chapter at Nitte Meenakshi Institute of Technology, Bangalore.

