

BMS

INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Department of Electronics and Communication Engineering

WAVES

Volume-7, Issue-1

Newsletter Date: 08th February 2021

Period: August 2020 to January 2021

DEPARTMENT VISION

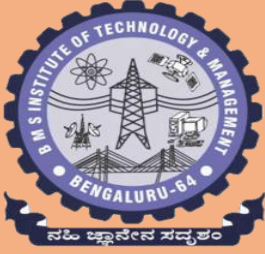
Be a pioneer in providing quality education in electronics, communication and allied engineering fields to serve as valuable resource for industry and society

DEPARTMENT MISSION

- Impart sound theoretical concepts & practical skills through innovative pedagogy
- Promote interdisciplinary research
- Inculcate professional ethics

PROGRAMME EDUCATIONAL OBJECTIVES

- Work as Professionals in the area of electronics and communication and allied engineering fields
- Pursue higher studies and involve in interdisciplinary research work
- Exhibit ethics, Professional skill and leadership qualities in their profession



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Department of Electronics and Communication Engineering



Message from Head of the Department

The Department of Electronics and Communication Engineering is showing consistent improvement in its academic, research and placement performance. It offers a range of innovatively designed programs like open courses and value added courses whose curricula are constantly updated to meet the changing requirement of the industry and to meet the needs of major stakeholders. We believe that our students have been well accepted in their job profiles and have consistently exceeded expectations of the corporate world.

The department of Electronics and Communication Engineering brings out its bi-annual newsletter "WAVES" every semester. The Department is releasing its Volume-7, Issue-1, covering faculty and students' achievements for the period of August 2020-January 2021.

I Hope this will give motivation and encouragement for both students and faculty to excel further in their respective fields.

I also congratulate the editor team members for their efforts, hard work and precise coverage of the information. I wish them all the best.

Happy reading!

Dr. Ambika R

Professor & Head

Department of ECE, BMSIT&M

Faculty & Student Awards

- Mamatha K. R, Assistant Professor, Department of ECE and Students of 2020 batch Ananth S Bhat, Aditya N Rao, Anubhav received Best Project of the year for the project titled "Lifesaving system for road accidents" at the state level project competition organized by KSCST on 21.09.2020.

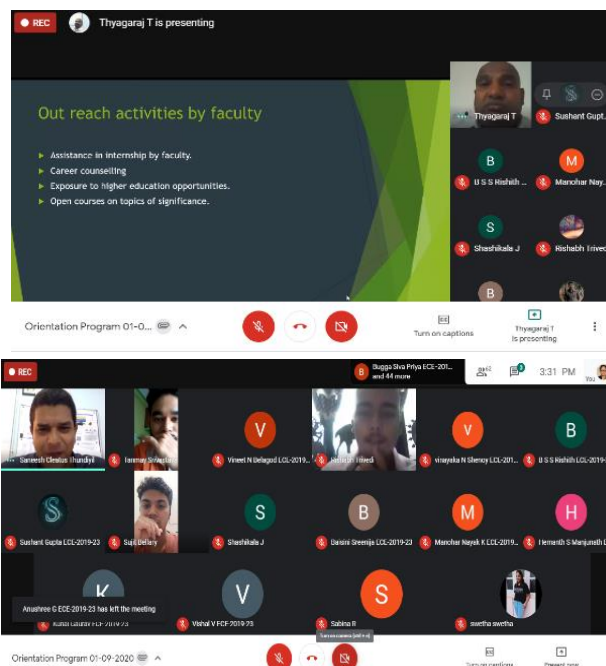
Memorable Moments and Best practices

- Department of ECE has conducted orientation programme for third semester students 2019-2023 batch on 01.09.2020 through online platform google meet. A total of 125 students have attended the orientation programme.

Coordinators: Dr.Surekha R Gondkar, Associate Professor and Mr. Thyagaraj T, Assistant Professor

Following are the list of activities conducted:

Ice breaking session, Brief dept., presentation, Faculty introduction, University Curriculum and Learning beyond curriculum , Professional and open Electives- Significance and Scope, PBL/Open Courses: Significance and Scope, Alumni Interaction/ Expert Talks /Industry Visits, Student Achievements, Insight on Various Online learning portals, Student Internships : Significance, Scope and Opportunities, Placement briefing, Dept., rules and regulations, Outcome Based Education (OBE) : Benefits and various methods, Vision / Mission of the department Courses Outcomes / Program Outcomes and Laboratory virtual tour.



- Department of ECE conducted DAB (Department Advisory Board) meeting online on 19.09.2020.

Agenda of the meeting are as follows:

Dissemination of department achievements for the academic year 2019-2020.

Submission of program assessment committee recommendation for the review and approval.



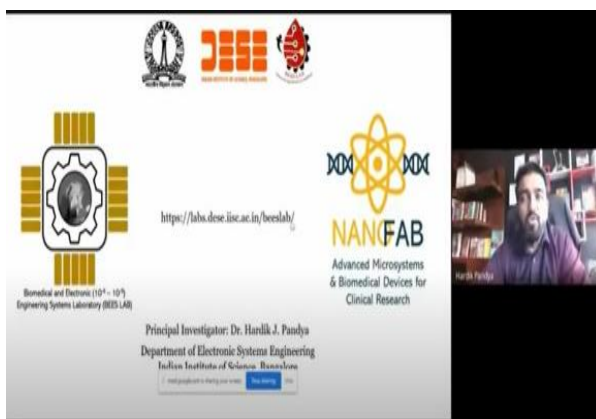
- Department of ECE hosted an International Webinar on "Global Career Prospects in Electronics and communication engineering" as a part of the international webinar series on global career prospects, BMSIT&M. The event was benefitted by around 245 aspiring students.

The event comprised of two sessions, wherein the morning session was engaged by Dr. Palaiahnakote Shivakumara an international figure, with Ph.D. from the University of Mysore, Karnataka, India. Currently, working as associate professor at University of Malaya (UM), Kuala Lumpur, Malaysia.

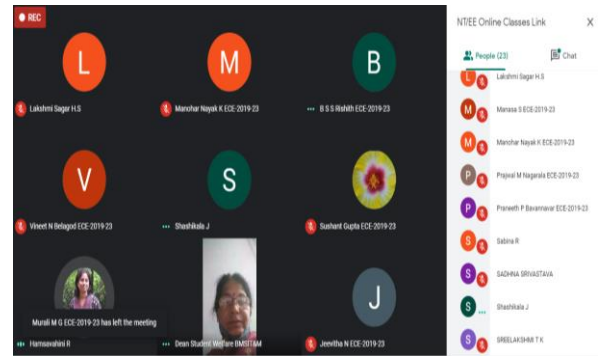
The talk envisioned the techno-cultural gap that exists between the current student generation and the teaching fraternity.



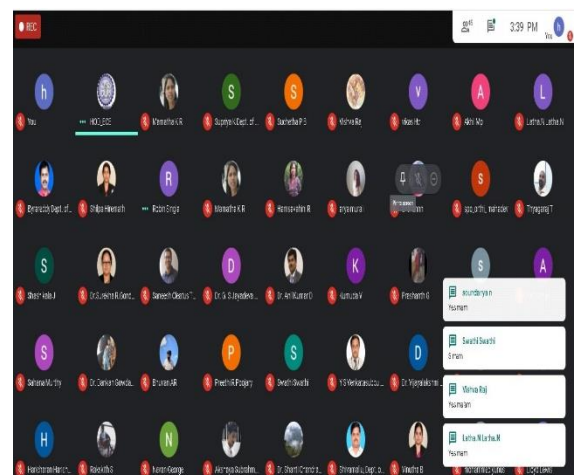
The second session was engaged by Dr. Hardik J. Pandya, Assistant professor, Department of Electronic Systems Engineering, Indian Institute of Science, Bangalore. Dr. Pandya heads three laboratories in ESE focused on developing new class of biomedical devices and technologies. His talk was very lucid and the exhaustive areas of applicability and reach of electronics and communication engineering was an eye opener not only for the students but also for the teachers.



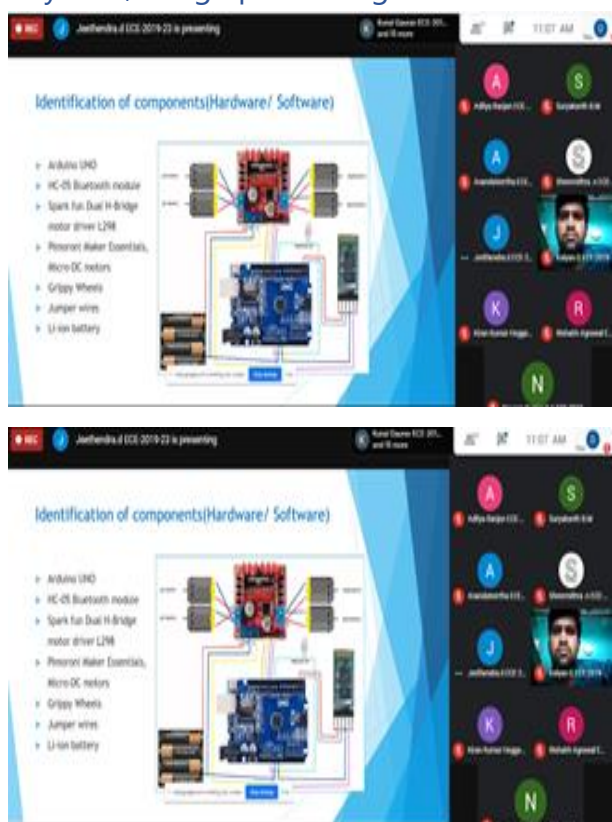
- Department of ECE conducted Parents Teacher Meeting (PTM) through online platform using GOOGLE MEET on 20.10.2020 and 21.10.2020 for 3rd, 5th and 7th semester student parents. HoD asked parents about the students' health and also asked the suggestions for further improvement for the betterment of students and department.



- Department of ECE conducted one week online induction programme for first year students from 14.12.2020 to 23.12.2020. During this one week induction program following are the activities held by the department. Familiarization of Department and all laboratories virtual tour, Literature / Literary Activities, virtual local tour to the places such as Nandi Village, Muddenahalli and Devanahalli fort, identification of co-curricular talents and exhibition of the same on last day programme.



- Department of ECE organized Open Day on 4.12.2020 and 7.12.2020 to showcase the students Projects under Project Based Learning (PBL). Students of III and V semester students exhibited their PBL projects which prove the student's ability to apply their learning skills to solve the real world problems. More than 100 projects were demonstrated. The projects were mainly based on Robotics, IOT, Applications using Arduino, Web development applications using Java and Python, Image processing etc.



Session Chair

- Dr. Ambika R, Professor and Head, ECE was a session chair for "IEEE Third International conference on "Multimedia processing, Communications and Information Technology-MPCIT 2020" 11-12, Dec 2020 at JNNCE, Shivamogga on 11.12.2020.

Faculty as resource person

- Dr. Mala C S, Professor, Department of Electronics and Communication Engineering has extended her support as resource person on the occasion of Gandhi Jayanti on 02.10.2020 organized by City International School, Lucknow and gave a talk on "Awaken the Mahatma in us".
- Dr. Ambika R, Professor and Head, ECE has extended her support as Resource person for 6 Days AICTE – ISTE INDUCTION /REFRESHER PROGRAM on "NEXT GENERATION WIRELESS COMMUNICATION: 5G ITS IMPLEMENTATION" on 21.12.2020 to 26.12.2020 at KS Institute of Technology, Bengaluru.

Board of Examiners

- Dr. Ambika R, Professor and HoD, ECE is a BOE member for VTU, EC/TC board for the academic year 2020-21.

Reviewer for Journal / Conference

- Dr.Vijayalakshmi G V, Associate Professor, Department of Electronics and Communication Engineering was a reviewer for IEEE access and IEEE Third International Conference on "Multimedia Processing, Communications and Information Technology" - MPCIT 2020 , JNNCE, Shivamogga.
- Dr. Ambika R, Professor and Head, ECE was a reviewer for "IEEE Third International conference on "Multimedia processing, Communications and Information Technology-MPCIT 2020".

- Saneesh Cleatus T, Associate Professor, Department of ECE was a reviewer for Journal of The Institution of Engineers (India): Series B, Springer.
- Saneesh Cleatus T, Associate Professor, Department of ECE was a reviewer for submissions of International Conference on Advances in Electronics, Computers and Communications.

Faculty Internship

- Dr. Jayadeva G S, Professor, Department of ECE has undergone online industry internship at PANTECH E-learning from 18.01.2021 to 29.01.2021.

Student Internship

- Sayan Chakraborty, Student, 5th semester Department of ECE has undergone industry internship on “Web Development” offered through IT-inCloud from 10.09.2020 to 15.10.2020.
- Rahul M, Student, 5th semester Department of ECE has undergone industry internship on “Data Science and Machine Learning” offered through The Sparks Foundation from 30.09.2020 to 21.10.2020.
- Sanket kundu, Student, 5th semester Department of ECE has undergone industry internship on “Robotics” offered through Ekzen Robotics from 20.08.2020 to 20.10.2020.
- Hasan Tashif, Student, 5th semester Department of ECE has undergone industry internship on “Digital marketing” at MyCaptain from 7.10.2020 to 07.11.2020.
- Rajat Mundhra, Student, 3rd semester Department of ECE has undergone

industry internship on “Data Science and Machine Learning” at The Sparks Foundation from 30.10.2020 to 21.11.2020.

- Rahul M, Student, 5th semester Department of ECE completed course has undergone industry internship on “Data Analyst Intern” at MedTourEasy from 25.10.2020 to 25.11.2020.
- Vishrutha VS, Student, 5th semester Department of ECE has undergone industry internship at My Captain from 07.11.2020 to 12.12.2020.
- Himanshu Choudhary Student, 5th semester Department of ECE has undergone industry internship at The Sparks Foundation from 12.12.2020 to 31.12.2020.

Expert talk organized

- Department of ECE organized an expert talk on the topic “Solar Energy Technology” for Second Year Students 2019-23 batch students on 04.09.2020.



- Department of ECE organized an expert talk on the topic “Solid Waste Management “for 3rd, 5th and 7th semester students on 12.11.2020.



- Department of ECE organized an expert talk titled "Semiconductor memory Types & Technologies" on 12.12.2020 for III semester Students. The Resource Person Mr. Mohit Gupta, Principal Engineer, Broadcom, Bengaluru highlighted on Moore's Law, Different Types of Memories, Technologies.



International Journal Publications

- Shivarudraiah B, Suryakanth B, Ravindra V Asundi "Railway Track Crack Detection and Collision Avoidance using ARM Cortex" Journal of Seybold Report Volume-15, Issue-8, ISSN NO: 1533-9211, August 2020, pp2965-2971 (Scopus).
- Suryakanth B, Dr. Hari Prasad S A, "A Deep Learning Approach using 3D Convolution Neural Networks for detection of Alzheimer's Disease" Journal of Seybold

Report Volume-15, Issue-8, ISSN NO: 1533-9211, August 2020, pp1517-1521 (Scopus).

- Shilpa Hiremath, Dr. A Shobha Rani, "A concise report on image types, image file format and noise model for image pre-processing", International research journal of engineering and technology (IRJET), ISSN: 2395, Volume-7, Issue-8, Aug 2020, pp4991-4997.
- Hamsavahini R, Assistant Professor, Department of Electronics and Communication Engineering published a paper titled "A review of resistor switching devices for memory and neuromorphic computing applications" in Journal of Seybold Report, ISSN: 1533 - 9211 ,Volume 15 , Issue 9 ,October 2020.
- Hamsavahini R, Rashmi N, Adhya Rao , Harshita V M, Department of Electronics and Communication Engineering published a paper entitled "Remote Sensing and Associated Payloads in Moon and Mars Space Missions: A Review" in Journal of Seybold Report, ISSN: 1533 - 9211 ,Volume 15 , Issue 9, October 2020.
- Deepika Selvaraj, Arunachalam Venkatesan, Vijayalakshmi G. V, Mahesh, Alex Noel Joseph Raj, "An integrated feature frame work for automated segmentation of COVID-19 infection from lung CT images", International Journal of Imaging Systems and Technology, 23.11.2020, Wiley Publishers (Web of Science and Scopus).
- Shobha Rani A, K C Chethan, T G Basavaraju, "Adaptive informant factor-based optimize channel allocation in large-scale mesh networks", International Journal on Wireless and Mobile Computing, Vol. 19, No. 2, 2020, 188-194.(Scopus)

- Rashmi N, Hamsavahini R, et. al," Effects to overcome the existing impairments in implementing Helicopter satellite communication system(HSCS)",European Journal of Molecular & Clinical Medicine, 2020, Volume 7, Issue 8, Pages 3037-3043.(Scopus)

International Conference

Publications

- Ambika R and Seema S, "Void Handling Routing Protocols in Underwater Wireless Sensor Networks: A Survey", International Conference on Multidisciplinary Technologies and Challenges in Industry 4.0, October 2020.
- S. Reddy, S. B. Seshadri, G. Sankesh Bothra, T. G. Suhas and Saneesh Cleatus Thundiyl, "Detection of Arrhythmia in Real-time using ECG Signal Analysis and Convolutional Neural Networks", 2020 IEEE 21st International Conference on Computational Problems of Electrical Engineering (CPEE), Pińczów, Poland, 2020, pp. 1-4, doi:10.1109/CPEE50798.2020.9238743., 26.10.2020

OBE activity

- Shilpa Hiremath, Assistant Professor, Department of Electronics and Communication Engineering conducted Poster Presentation activity for 7th semester students on the topics related to satellite communication on 19.11.2020.
- Dr. Ambika R, Prof. Suryakanth B M and Prof. Shivarudraiah B, Department of ECE have conducted poster presentation for the course Information Theory and

Coding for fifth semester ECE students on 10.12.2020, 11.12.2020 and 15.12.2020.

- Shilpa Hiremath, Assistant professor, Department of ECE has conducted poster presentation for the course Digital Image Processing for seventh semester ECE students in the month of December 2020.

Book Chapter

- M. C. Hanumantharaju, V. N. Manjunath Aradhya, G. Hemantha Kumar "Understanding and Analysis of Enhanced COVID-19 Chest X-Ray Images" Springer Book chapter- Intelligent Systems and Methods to Combat Covid-19, August 2020, pp 47-55.
- Shilpa Hiremath, Chandra Prabha R, Assistant professors, Department of ECE authored a Book Titled "Handbook of Research on Deep Learning-Based Image Analysis Under Constrained and Unconstrained Environments" for the Chapter titled "Computer Processing of an Image: An Introduction".

FDP /Workshops/STTP attended

- Dr. Ambika R, Professor and Head, Department of Electronics and Communication Engineering participated in Six days Faculty Development Program on "Trends in IoT, Medical Image and Speech Processing" from 04.08.2020 to 09.08.2020, organised by department of Information Science and Engineering, Siddaganga Institute of Technology, Tumakuru.
- Dr. Vijayalakshmi G V, Associate Professor, Department of Electronics and Communication Engineering participated

in Six days Faculty Development Program on " Trends in IoT, Medical Image and Speech Processing " from 04.08.2020 to 09.08.2020, organised by department of Information Science and Engineering, Siddaganga Institute of Technology, Tumakuru.

- Hamsavahini R, Assistant Professor, Department of ECE attended 5 days online FDP on "Trends and Applications in Biomedical Signal and Image Processing" from 21.09.2020 to 25.09.2020 at G. H. Raisoni College of Engineering, Nagpur organised by AICTE Training and Learning Academy (ATAL).
- Mamatha K. R, Assistant Professor, Department of ECE attended 5 days online FDP on "Trends and Applications in Biomedical Signal and Image Processing" from 21.09.2020 to 25.09.2020 at G. H. Raisoni College of Engineering, Nagpur organised by AICTE Training and Learning Academy (ATAL).
- Shashikala.J, Assistant Professor, Department of ECE attended 5 days online FDP on "Trends and Applications in Biomedical Signal and Image Processing" from 21.09.2020 to 25.09.2020 at G. H. Raisoni College of Engineering, Nagpur organised by AICTE Training and Learning Academy (ATAL).
- Shilpa Hiremath, Assistant Professor, Department of ECE attended 5 days online FDP on "Artificial intelligence and machine learning application in biomedical engineering" from 21.09.2020 to 25.09.2020 at G. H. Raisoni College of Engineering, Nagpur organised by AICTE Training and Learning Academy (ATAL).
- Dr. Vijayalakshmi G V, Associate Professor, Department of ECE attended 5 days online FDP on " Artificial Intelligence and Machine Learning Applications in Biomedical Engineering " from 21.09.2020 to 25.09.2020 at University BDT College of Engineering, Davanagere organised by AICTE Training and Learning Academy (ATAL).
- Chandra prabha R, Assistant Professor, Department of ECE attended 5 days online FDP on " Artificial Intelligence and Machine Learning Applications in Biomedical Engineering " from 21.09.2020 to 25.09.2020 at University BDT College of Engineering, Davanagere organised by AICTE Training and Learning Academy (ATAL).
- Rashmi N, Assistant Professor, Department of ECE attended 6 days online FDP on "Energy efficient techniques for 5G wireless communications" from 05.10.2020 to 10.10.2020 organised by AICTE.
- Dr.Vijayalakshmi G V, Associate Professor, Department of Electronics and Communication Engineering participated in Two weeks online e-SIP(Student Induction Program) organised by AICTE from 09.11.2020 to 20.11.2020.
- Shilpa Hiremath, Assistant Professor, Department of Electronics and Communication Engineering participated & completed successfully AICTE Training And Learning (ATAL) Academy online FDP Program on " Artificial Intelligence " organised by Poojya Doddappa Appa College of Engineering, Kalaburagi from 09.11.2020 to 13.11.2020.
- Dr. A. Shobha Rani, Associate Professor, Department of Electronics and Communication Engineering , participated in five days online STTP on " Selenium

Webdriver using PYTHON " organised by Department of Master of Computer Applications, M S Ramaiah Institute of Technology, Bangalore, from 11.11.2020 to 19.11.2020.

- Dr. Deepa N Reddy, Assistant Professor, Department of Electronics and Communication Engineering , participated in five days online STTP on " Selenium Webdriver using PYTHON " organised by Department of Master of Computer Applications, M S Ramaiah Institute of Technology, Bangalore, from 11.11.2020 to 19.11.2020.
- Vinutha B, Assistant Professor, Department of Electronics and Communication Engineering , participated in five days online STTP on " Selenium Webdriver using PYTHON " organised by Department of Master of Computer Applications, M S Ramaiah Institute of Technology, Bangalore, during 11.11.2020 to 19.11.2020.
- Suryakanth B, Assistant Professor, Department of Electronics and Communication Engineering , participated in five days online STTP on "GPU computing" organised by Department of Electronics and Telecommunication, VIT, Pune in association with ATAL AITCE from 23.11.2020 to 28.11.2020.
- Dr. Anil kumar D, Assistant Professor, Department of Electronics and Communication Engineering participated in five days online STTP on "Augmented reality /Virtual reality" organised by Geetham University in association with ATAL AITCE from 23.11.2020 to 27.11.2020
- Shivarudraiah B, Assistant Professor, Department of Electronics and

Communication Engineering, participated in AICTE sponsored six days online STTP on "Applications of NI LabVIEW phase-1" organised by Department of Electronics and Communication Engineering, NCET, Bengaluru from 07.12.2020 to 22.12.2020.

- Dr. Jayadeva G S, Professor, Department of ECE attended one week online FDP on "Image and Signal Processing" from 04.01.2021 to 08.01.2021 organized by JSS Academy of Technical Education, Bengaluru.
- Dr. Surekha R. Gondkar Associate Professor, Department of ECE attended one week online FDP on "Image and Signal Processing" from 04.01.2021 to 08.01.2021 organized by JSS Academy of Technical Education, Bengaluru.

Online Courses completed by faculty

- Dr Vijayalakshmi G V, Associate Professor, Department of Electronics and Communication Engineering , completed course on "Introduction to Programming with MATLAB", an online non-credit course authorized by Vanderbilt University, offered through Coursera on 04.08.2020.
- Dr. Vijayalakshmi G V, Associate Professor, Department of ECE, completed course on "Introduction to Electronics" offered through Coursera on 29.09.2020.
- Chandra prabha R, Assistant Professor, Department of ECE, completed course on "Introduction to Electronics" offered through Coursera on 29.09.2020.
- Dr. Mala C S, Professor, Department of Electronics and Communication

Engineering completed course on "Take Your English Communication Skills to the Next Level" offered through Coursera on 23.10.2020.

- Dr. Surekha R. Gondkar, Associate Professor, Department of ECE completed 9 week online course on "Introduction to Programming with MATLAB" using Coursera platform on 04.01.2021.

Webinars attended by faculty

- Faculty members of Department of ECE participated in the national level webinar on "Future of Higher Education in India-Turning challenges into opportunities" on 25.09.2020 organized by BMS Institute of Technology & Management, Bengaluru-64. Keynote speaker of this webinar was Dr. M K Sridhar, Member of NEP drafting committee, Member of UGC, President CESS, Bengaluru.
- All Faculty members of Department of ECE participated in the national level webinar on "Aacharyadevo Bhava" on 11.09.2020 organized by NAAC (National Assessment and Accreditation Council). Keynote speaker of this webinar was Dr. Ramesh Pokhriyal Nishank, Union Cabinet Minister for Education, Government of India.
- All Faculty members of Department of ECE participated in the national level webinar on "Engineer's day Celebrations" on 15.09.2020 organized by Department of Civil Engineering, BMSIT&M. Keynote speaker of this webinar was Shri. Munish Moudgil, IAS officer, Government of Karnataka.

- Shilpa Hiremath, Assistant Professor, Department of ECE attended online National level webinar "Optical and electrical modelling software for semiconductor devices" on 11.09.2020 organized by BMS Institute of Technology & Management, Bengaluru-64.
- Dr A Shobha Rani, Associate Professor, Department of Electronics and Communication Engineering has received certificate of achievement after successfully completing the assessment after participating in the webinar on the topic ""National Education Policy 2020: Curriculum Framework for Multidisciplinary Undergraduate Education", on 18.11.2020, organized by B.M.S College for Women (Online).
- Dr Deepa N Reddy, Assistant Professor, Department of Electronics and Communication Engineering has received certificate of achievement after successfully completing the assessment after participating in the webinar on the topic ""National Education Policy 2020: Curriculum Framework for Multidisciplinary Undergraduate Education", on 18.11.2020, organized by B.M.S College for Women (Online).
- Vinutha B, Assistant Professor, Department of Electronics and Communication Engineering has received certificate of achievement after successfully completing the assessment after participating in the webinar on the topic ""National Education Policy 2020: Curriculum Framework for Multidisciplinary Undergraduate Education", on 18.11.2020, organized by B.M.S College for Women (Online).

Webinars Attended by technical staff

- All staff members of Department of ECE participated in the national level

webinar on “Future of Higher Education in India –Turning challenges into opportunities” on 25.09.2020 organized by BMS Institute of Technology & Management, Bengaluru-64. Keynote speaker of this webinar was Dr. M K Sridhar, Member of NEP drafting committee, Member of UGC, President CESS, Bengaluru.

Online Quiz attended by faculty

- Dr. Ambika R, Professor and Head, Department of Electronics and Communication Engineering has participated in Online Quiz on “Awareness on Cyber Forensics”, organized by Siddaganga Institute of Technology on 01.08.2020.

Project presentations

- Department final year Project presentations

No: of Batches	Dates	No: of Students Participated	Description (Brief Domains)
55	27 th & 28 th Oct.2020	205	Biomedical Signal Processing, Automation, Data security, Robotics, Machine learning application in health care, Image processing applications, Embedded Systems.
	27 th & 28 th Nov.2020		

- Department PBL Project presentations

No: of Batches	Dates	No: of Students Participated	Description (Brief Domains)
86	16th & 17th Oct. 2020, 20 th Nov.020	324	Embedded Systems IOT Signal Processing Web application

EDITED & COMPILED BY

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