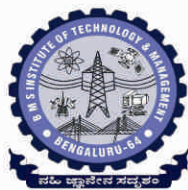


TECHSANCHALANA

Volume 8

August 2020 to July 2021



BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Estd. in 2002 | Affiliated to VTU | Approved by AICTE | Autonomous



Late Sri B. M. Srinivasaiah
Founder, BMSET



Late Sri B. S. Narayan
Donor Trustee, BMSET

Founder's Vision

Promoting prosperity of mankind by augmenting human resource capital through quality education and training

Vision

To emerge as one of the finest technical institutions of higher learning to develop engineering professionals who are technically competent, ethical and environment friendly for betterment of society.

Mission

Accomplish stimulating learning environment through high quality academic instruction, innovation and industry-institute interface.



TECHSANCHALANA

Volume 8

August 2020 to July 2021

From Principal's Desk

Dear Friends,

I am delighted to place in your hands the Annual report of BMS Institute of Technology and Management, **TechSanchalana** for the Academic Year 2020-21. My hearty congratulations to the team of Deans, faculty and staff members who have worked hard to bring this piece of marvel to us on time.



We all have seen the way the Covid-19 pandemic disrupted every one's life and particularly of those in the education sector.

Despite this, educational activities at BMSIT&M didn't stop, but continued with newer alternative namely, digital platforms. Our faculty and staff members swiftly adapted to the changed scenario and did their best to reach out online to their students who were scattered across India and other countries and ensured that their learning experience was at the best despite the constraints due to pandemic. They utilized the online platforms excellently to conduct classes, proctoring, parents-teachers' meeting, co-curricular activities, and some extra-curricular activities too. However, as per the University guidelines, in-person examinations were conducted for a large number of students but with strict adherence to the SOP issued by the Govt. Consequently, no serious issues relating to Covid-19 were reported.

The high academic spirit and technological excellence of the institute brought several laurels during the AY 2020-21. I am glad to share that AICTE selected BMSIT&M as an Ambassador for Change under its *Leadership in Teaching Excellence* (LITE) program, and as a Mentor Institute for mentoring 3 other engineering colleges for academic excellence under *Margadarshan* scheme. The UGC, New Delhi and VTU, Belagavi conferred BMSIT&M with autonomous status. AICTE-CII survey ranked the institute in the topmost *Platinum* category in view of its strong partnership with industries. National Institutional Ranking framework (NIRF), Govt of India ranked BMSIT&M at 158 among all engineering colleges in India.

Our students won a lot of prizes in the university-level, state-level, and national level competitions organized by institutions like Government of India, TCS, IIT-Bombay, Karnataka State Council for Science and Technology, and Karnataka Science and Technology Academy. Students secured 8 ranks and 8 gold medals in the University examinations. An unprecedented number of companies visited us for campus selection and a large number of job-offers were made to our students. Many faculty members acquired Ph.D degree during the year which increased the per centage of faculty members with doctorate degree to 54%. The number of research publications in high quality journals increased to all time high., i.e., close to 200 with close to more than 1500 citations. Significant infrastructure was added with a huge investment by the Management and grants from Government agencies. Novel academic initiatives such as project-based learning, industry-oriented courses, industry internships for both faculty and students have all kept the institution's learning environment very vibrant. I am indebted to all the stakeholders who have contributed to this exceptional progress of the institute. I am sure that this continued tempo of all-round progress can take the institution to new heights in the days to come.

Thank you. Wish you a happy reading.

Dr. Mohan Babu G. N.
Prinicpal

Message from the Dean Students' Welfare

Dear students and staff,

I am glad that the Techsanchalana Volume 8 is brought out. In this particular issue the highlights have been signing of MOUS with prestigious organizations and companies for a better Industry Institute Interactions.

This issue also highlights the endeavours of both the staff and students in improving the quality of education imparted to them through online webinars, Industrial Visits and Expert Talks during this pandemic period. I congratulate the editorial team headed by Dr. A. Shobha Rani of ECE, Ms. Thejaswini S of ETE and their dedicated team.



Dr. C. S. Mala

Editorial Board

Honorary Editor



Dr. Mohan Babu G N
Principal, BMSIT&M

Chief Editors



Dr. Shobha Rani
Associate Professor, ECE Dept.



Mrs. Thejaswini S
Assistant Professor, ETE Dept.

Faculty Co-ordinators

Mr. Shivarudraiah	-	ECE Dept.
Mrs. Saritha I G	-	ETE Dept.
Mr. Vikram Chekuri	-	EEE Dept.
Mr. Muneshwara	-	CSE Dept.
Mrs. Nitya Poornima	-	MECH Dept.
Mrs. Shimna	-	CIVIL Dept.
Mrs. Sridevi	-	MCA Dept.
Dr. Narasimha Murthy	-	ISE Dept.
Dr. Anupama	-	AI&ML Dept.
Dr. Annapurna	-	MATHEMATICS Dept.
Dr. Basavaraj R B	-	PHYSICS Dept.
Dr. Jyoti Roy	-	CHEMISTRY Dept.

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DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

MoUs / AWARDS / RECOGNITIONS

BOS/BOE:

- Dr. Bharathi M A, Professor and HoD, Department of AI&ML was BoS member for PDA College of Engineering, Kalburgi on 12.8.2020.
- Dr. Bharathi M A, Professor & HoD, AI&ML was a BOE member for MSRIT on 19.11.2020.

Faculty as Resource Person:

- Dr Anupama H S, Associate Professor, Department of AIML has extended her support as Resource Person for Webinar on "Brain Computer Interface and its Applications" on 7.7.2020 at R.V. College of Engineering, Bengaluru. (Online).
- Dr Vishwa Kiran S, Assistant Professor, Department of AIML has extended his support as Resource Person for Webinar on "See Inside C: Unexplored feature in Academics", on 13.7.2020 at Dr. Ambedkar Institute of Technology", Bengaluru. (Online).
- Dr Santhi Natarajan, Associate Professor, Department of AIML has extended her support as Resource person for the Faculty Development Programme on the topic "Machine Learning" on 31.7.2020 at BMS Institute of Technology and Management, organised by MCA department. (Online).
- Dr Anupama H S, Associate Professor, Department of AI&ML has extended her support as Resource Person for the two days' workshop on "Artificial Intelligence and its Application: A Practical approach" organized by Department of Computer Science and Engineering, VVCE, Mysuru on 18.8.2020.
- Dr Bharathi Malakreddy A, Professor and HoD, Department of AI&ML has extended her support as Resource person for FDP on "Opportunities and Challenges in Post Pandemic Era: An Overview" organised by BMSIT&M on 10.8.2020.

- Dr Anupama H S, Associate Professor, Department of AI & ML has extended her support as Resource Person for one week online FDP entitled "Emerging Technologies in Wearable Devices" on 19.1.2021 at Department of Computer Science and Engineering, UVCE, Bangalore University.
- Dr Vishwa Kiran S, Assistant Professor, Department of AI & ML has extended his support as Resource person for ATAL workshop on "Wearable OS and Getting Started with Raspberry Pi" from 18.1.2021 to 19.1.2021 at Department of Computer Science and Engineering, UVCE, Bangalore University.
- Dr Vishwa Kiran S, Associate Professor, Department of AI & ML, was a resource person for the fourth phase of the AICTE sponsored STTP on "IoT powered Solutions for HealthCare Innovations- Research Perspective", organized by KCG College of Technology on 18.3.2021.
- DR. Bharathi M A, Professor & HoD, AI&ML, was a resource person for Machine learning in Health Care Domain, Reva University on 10.5.2021.
- Dr. Santhi Natarajan, Associate Professor, Department of AI&ML, was invited as speaker for the Webinar series on "Machine Learning Methods and Applications" organized by the MCA department of New Horizon College of Engineering, Bangalore, held on 3.11.2020.

Reviewer for Journal / Conference:

- Dr Anupama H S, Associate Professor, Department of AIML was a reviewer for conference ERCICA_2020, Nitte Meenakshi Institute of Technology, Bengaluru, India.
- Dr. Santhi Natarajan, Associate Professor, Department of AIML, was a reviewer for B-HTC 2020: 2020 IEEE Bangalore Humanitarian Technology Conference, Bengaluru, India.

- Dr Anupama H S, Associate Professor, Department of AI&ML was a reviewer for Journal of Education.
- Dr Rakesh N, Associate Professor, Department of AI&ML, Reviewed three technical research papers for The 2021 International Conference on Radar, Antenna, Microwave, Electronics and Telecommunications (ICRAMET) will be held **virtually on November 23th - 24th, 2021.**) **Research Center for Electronics and Telecommunications (PPET), Indonesian Institute of Sciences (LIPI).**

DEPARTMENTAL ACTIVITIES:

DAB (Department Advisory Board)

- Department of Artificial Intelligence and Machine Learning conducted a technical talk on the topic IIoT and AI&ML by Rugged board team on 24.9.2020 as club activity.
- The 2nd Department Advisory Meeting (DAB) Meeting was held in the Department of Artificial Intelligence and Machine Learning on 26.9.2020. Dr Bharathi Malakreddy A, HoD, welcomed all the DAB members and presented the key improvements of the Department in the academic year 2019-20. The following points were discussed in the meeting: Curriculum design for the Autonomous UG Program, Scheme and Syllabus Content, evaluation, Incorporation of Blended Learning. Discussed on the guidelines to be given to students for Project Based Learning. Later, all of us thanked all the DAB members for their time spent during DAB and suggestions given.

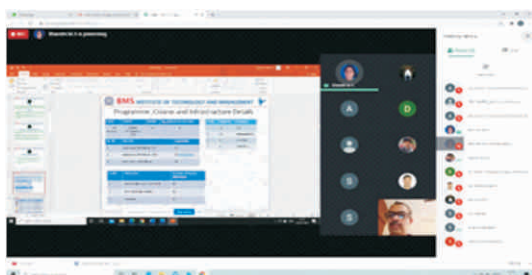


Figure : DAB Meeting

PTM (Parents Teachers Meeting)

- for 3rd semester was conducted on 17.9.2020 at 11:30AM through Google Meet (Online). Around 30 parents participated in the PTM. Following Points were discussed in the Meeting:
- Conduction of Online Classes: Parents were very happy about the class conduction, but they were worried about the labs conducting online. Lab Co-Ordinators made clear to parents that, they are taking videos personally in lab and showing to students live video and uploading it in the GCR. They are also told to use the laptop when showing the lab steps so that they can execute parallely with the faculty as well.

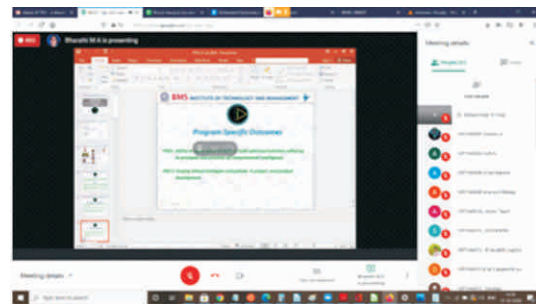


Figure 2: PTM

International webinar

- Department of AI & ML has organised International Webinar Series on Global Career Prospects Awareness Program for Artificial Intelligence and Machine Learning Aspects on 2nd October 2020.



FDP conducted/ organised

- Department of AI&ML has conducted an FDP on "Opportunities and Challenges in Post Pandemic Era: An Overview", from 10.8.2020 to 14.8.2020. This

FDP saw active participation of about 200 members from Faculty, Research scholars, PG Students, and Industry.

- Department of AI & ML has conducted an FDP on "Demystifying Machine Learning Concepts", from 17.5.2021 to 21.5.2021. This FDP saw active participation of about 200 members from Faculty, Research scholars, PG Students, and Industry.

Expert/Feature talk organized

- Department of AI&ML has organised a Feature talk on the topic "Challenges and Opportunities of Artificial Intelligence and Engineering in Defence Sector", on 3.8.2020.
- Dr Bharathi Malakreddy and Dr Santhi Natarajan has organised a webinar on "Let's Talk Science" - Expert Talk by Dr. Rajasekhara Giraddi, Pfizer.
- Brainium Expert Talk series hosted by Brainium, the technical forum of the Department of Artificial Intelligence and Machine Learning, BMSIT&M, Bengaluru on "Cryptocurrency and its Bridge with Artificial Intelligence " on 22nd May 2021 at 2.00 pm delivered by Ms. Nalayini G, Senior Consultant at EY LLP. Coordinated by Dr Rakesh N, Associate Professor, Department of AI & ML.
- The Brainium Technical forum of Dept. of AI & ML, BMSIT & M, Bengaluru in association with Huawei Technology, India conducted a webinar talk on Huawei Developer mobile app development foundation course on 24th May 2021 at 4.00 pm to 6.00 pm., which is a platform for industry-academia skill development tie-up program. Coordinated by Dr Rakesh N, Associate Professor, Department of AI & ML.

FACULTY PAPER PUBLICATION

International Journal

- Dr Anupama H S, "Creation of Open Educational Resource (OER) Activity: Flipping the Classroom with Moodle", Journal of Seybold Report (UGC Approved Journal), ISSN NO: 1533-9211, Volume 15, Issue 7, Page no: 965-979.

International Conference

- Dr Santhi Natarajan, Dr Bharathi Malakreddy and Anand Ravishankar, "Sylvian-Silva (SFORCE): An Ensembled Boost Approach Towards Machine Learning", presented paper for the conference IEEE CONECCT 2020, on 2-7-2020.
- Dr Anupama H S, Associate Professor, Department of AI & ML, has presented and published a paper at the IEEE sponsored International Conference on Artificial Intelligence and Smart systems (ICAIS 2021) organised by JCT college of Engineering and Technology, Coimbatore, India on 26.3.2021.
- DR. Bharathi M A, Professor & HoD, AI&ML, has Published paper on "ECC based multi factor authentication and key generation systems for IoT Healthcare" , in Turkish Journal of Computer and Mathematics Education
- Dr. Santhi Natarajan, DR. Bharathi M A presented paper titled "AI_NAAV: An AI enabled Neurocognition Aware Autonomous Vehicle "at the B-HTC IEEE International Conference held on 8-9 Oct 2020.

DEPARTMENT OF CIVIL ENGINEERING

MoUs / Awards / Recognitions

MoU:

- BMS Institute of Technology and Management has signed an 'Memorandum of Understanding' with National Highway Authority of India (NHAI), on the eve of India's 74th Independence Day. The MoU is an earnest initiation to enhance the quality of learning and practical exposure for both students and faculty. Under this Memorandum of Understanding, student and faculty shall undertake internships, carry out research works and collaborate for better teaching-learning experience. The event is coordinated by Department of Civil Engineering, with Assistant Professor Mrs Shimna as the liaison.
- Department of Civil Engineering signed an MoU with Construction Management Training and Management and BMSIT&M on 30/08/2021, Coordinated by Dr Rajakumara H N Professor and Head, Department of Civil Engineering



- Department of Civil Engineering signed an MoU with Design Mentors and BMSIT & M on 30/08/2021, Coordinated by Dr Rajakumara H N, Professor and Head, Department of Civil Engineering



Faculty as Resource Person:

- Dr Rajesh Gopinath (Associate Professor & HoD, Dept. of Civil Engineering & Key Liaison-OIKOS) has delivered a Expert Talk on "Urban Warming: Need for Climate Sustainability in Smart Cities", on 6.08.2020 via Google Meet in the FDP on Smart City Innovations by Applying Engineering Technologie. The FDP was organised by "Department of Civil Engineering, RIT, Bengaluru". The talk can be viewed in the OIKOS YouTube Official Channel via the link https://youtu.be/VQ1_tlaZ_EM
- As part of Outreach of OIKOS, Dr Rajesh Gopinath (Associate Professor & HoD, Dept. of Civil Engineering & Key Liaison-OIKOS) has delivered a Expert Talk on "Urban Warming: A Case Study of Bangalore", on 24.08.2020 via Google Meet in the Expert Lecture series "Sunday Spark", organised by NGO EcoR, Cochin. The talk can be viewed in the OIKOS YouTube Official Channel via the link <https://youtu.be/oQoMytPomo4>
- Mr Vinod B R , Assistant Professor, Department of Civil Engineering, BMS Institute of Technology and Management Bangalore has Delivered an invited talk through online on "Technical Expectations in Construction Companies" at Wildhub Designs Pvt Ltd on 9.08.2020.
- Dr Rajesh Gopinath (Assoc.Prof & HoD, Dept. of Civil Engineering & Key Liaison-OIKOS); has delivered an Expert Talk on "Environmental Stewardship: Much needed Universal Human Value", on 17.12.2020 at The Oxford College of Engineering, Bengaluru; as part of the First Year Student's e-Induction Program.
- Dr. Rajesh Gopinath, Associate Professor and Head of Department of Civil Engineering, has delivered an invited expert talk via Webinar on "Environmental Stewardship", organised by Green Club, at RRIT (Bengaluru) on 18.11.2020.

- Dr. Rajesh Gopinath, Associate Professor and Head of Department of Civil Engineering, has delivered an invited expert talk on "Environmental Awareness and need for environmental Stewardship", organised by Department of information science and Engineering and Mechanics and Chemistry, Acharya Institute of technology (Bengaluru) on 10.12.2020.
- Dr P Velumani, Associate Professor, Department of Civil Engineering, has delivered an invited expert talk on "Indoor air Quality and Other Comforts in Building", organised by Navodaya Institute of Technology, Bigengera Road Raichur on 31.12.2020.
- Dr Rajesh Gopinath was a resource person and has delivered a Expert Talk on "Urban Warming : Need for Climate Sustainability in Smart Cities" on 11th January 2021; during the Refresher course on "Environmental Science / Education", sponsored by UGC, Human Resource Development Center (HRDC) at Savitribai Phule Pune University, Pune from 05 th January 2021 to 18 th January 2021.
- Dr Rajesh Gopinath (Assoc.Prof & HoD, Dept. of Civil Engineering & Key Liaison-OIKOS); has delivered an Expert Talk on "Urban Warming : Need for Climate Sustainability in Smart Cities", on 11.01.2021 at Human Resource Development Center (HRDC) at Savitribai Phule Pune University, Pune.
- Dr. Rajesh Gopinath (Assoc. Professor & HoD and Key Liaison-OIKOS) has participated in the One Day International Webinar on "Wetland Systems" organized by Department of Environmental Science, School of Earth Sciences, P.A.H. Solapur University, Solapur (MS) India on Monday, 2.2.2021.
- Shimna Manoharan, Assistant Professor, Department of Civil Engineering has extended their support as Resource person for technical talk on Carbon Footprint - Our responsibilities at Boomitra Sena Club of Marian College, Thiruvananthapuram, Kerala on 21.06.2021. 85 participants attended the interactive session.
- On the Eve of World Environment Day (5th June 2021), Dr Rajesh Gopinath (Assoc. Professor, Dept. of Civil Engineering) has delivered an Awareness Talk via Zoom/ Google Meet; on "Eco-Clubs : The Green Crusaders of Environmental Stewardship"; organised by B h o o m i t r a s e n a C l u b , Marian Engineering College, Kerala.
- On the Eve of World Environment Day (05.06.2021), Dr Rajesh Gopinath (Assoc. Professor, Dept. of Civil Engineering) has delivered Motivational Talk via Google Meet on "Environmental Sensitization and Stewardship: Need of the Hour", organised by Department of Civil Engineering, Vel Tech High Tech Dr Rangarajan Dr Sakunthala Engineering College, Chennai.
- On the Eve of World Environment Day (05.06.2021), Dr Rajesh Gopinath (Assoc. Professor, Dept. of Civil Engineering) has also presided as the Guest Speaker in online World Environment Day Celebrations viz Google Meet; organised by the Federation of International Students Associations Bangalore (FISA-B) and Indian Council for Cultural relations (ICCR) viz the Online Platform. He had addressed International Students from over 50 Countries and Sensitised them with the topic: World Environment Day: Just Another Day?"
- Dr. Rajakumara H N, Professor, Department of Civil Engineering extended their support as Resource person, delivered expert talk on "Sustainable Solid Waste Management Options for India" on 19/07/2021 for PES College Mandya.
- Dr. Athiyamaan, Assistant Professor, Department of Civil Engineering has delivered an expert talk on "Concept of Biomimicry in the field of Civil Engineering" organised by Adi Shankara Institute of Engineering and Technology on 14.06.2021.

- Dr. Athiyamaan, Assistant Professor, Department of Civil Engineering has delivered an expert talk on “A Review on Advancements in Special Concrete” organised by Balaji Institute of Technology and Science on 19.06.2021.

Faculty Awards:

- Vinod B R, Assistant Professor, Department of Civil Engineering, received an Best Young Researcher from IRDP Group of Journals on 13.12.2020.

Patent:

- Vinod B R, Shobha R Assistant Professor, Department of Civil Engineering Has filled patent with Application no: 202041041304, Title of Invention: “Novel Approach for Class Recording & Blackboard cleaning System and Methods thereof”, Date of filing:23-09-2020, Jurisdiction: Bangalore, India.
- Vinod B R, Shobha R Assistant Professor, Department of Civil Engineering Has filled patent with Application no: 202041041755, Title of Invention: “Occupational stress model and coping strategies thereof”, Date of filing:25-09-2020, Jurisdiction: Bangalore, India.
- Mr Vinod B R got the patent on Application no: 2021101722, Title of Invention: “An Investigation Of Abrasive Water Jet Machining On Glass Fiber Reinforced Polymers”, Date of filing: 04-04-2021, Jurisdiction: Australia.
- Dr Deepak M S got the patent on Application no: 202141013917 A, Title of Invention Cold Formed steel hybrid double box girders”, Date of filing: 09-04-2021, Jurisdiction: Chennai, India
- Shobha R , Application no: 202041042414, Title of Invention: “**Customized Placement Training assistance for students using Artificial Intelligence**”, Date of filing: 29-09-2020, Jurisdiction: : Chennai, India.

Reviewer for Journal / Conference:

- Dr. Deepak M S, Assistant Professor, Department of Civil Engineering was a reviewer for Engineering Construction and Architectural Management, Emerald Publishers (SCI).
- Dr. Deepak M S, Assistant Professor, Department of Civil Engineering was a reviewer for Structural Concrete, Wiley Publications. (SCI).
- Dr. Chandrashekharappa Agasnalli, Assistant Professor, Department of Civil Engineering was a reviewer for Online-SPRINGER International Conference (under the umbrella of Multi-conference ICETE 2020) on Civil Engineering Trends and Challenges for Sustainability (CTCS-2020)” during 22.12.2020 to 23.12.2020, which has been conducted by NMAM Institute of Technology, NITTE, Karkala Taluk, Udupi District, Karnataka, India.

Achievement:

- Dr Chandrashekarappa Agasnalli, Assistant Professor, Department of Civil Engineering has Coordinated for IIRS / ISRO outreach activity program as Nodal centre and received the certificates. The program details here below:
 - a) Basics of Remote Sensing Geographical Information System and Global Navigation Satellite System from 17.08.2020 to 20.11.2020.
 - b) Remote Sensing and GIS Applications from 26.10.2020 to 20.11.2020
- In outreach program expert talk has been delivered on various topic by different Scientist from IIRS-ISRO Dehradun. The course content was very relevant for all participants and it's very interesting. The course will be very helpful for all participants for their career point view.
- Two projects from the Department of Civil Engineering have participated in the “Fifth IEEE National Level Project Competition-2021 (Virtual)” on 26.06.2021. The competition was organised by GSSS Institute of

Engineering and Technology for Women, Mysuru IEEE Student Branch in association with IEEE Bangalore Section and IEEE Mysore Sub Section.

Details are follows :

Proposal of Smart-Elevated Shoulders for Existing Townships and Upcoming Smart Cities; by Students: Gurudeep G, Manohar B M, Sunkara Chethan (6th Semester), under guidance of Dr Rajesh Gopinath. Design of a novel-smart 'Prototype' for the removal of Suspended Particulate Matter, for improving Indoor Air Quality; by Ananya N.B, Manjusha M, Rupali Niranjana, Sushmitha.V (8th Semester), under guidance of Dr Rajesh Gopinath.

FACULTY PAPER PUBLICATION

International Journal:

- Manishh S Dharek "Experimental Investigation on strength performance of the brick produced by blended demolished waste with pozzolanic Materials", ASCM 2020 (Online National Conference on Advances in Sustainable Construction Materials) Organized by Department of Civil Engineering, National Institute of Technology Jamshedpur on 3.08.2020 to 4.08.2020.
- Dr RAJESH GOPINATH." Impact Of Chaotic Urbanisation On Bengaluru'S (India) Urban Avian Diversity", "Transylvanian Review of Systematical and Ecological Research (The Wetlands Diversity) 23, ISSN 2344-3219, PAGE NUMBER: 81-94, index by web of science
- Dr Deepak M S." Influence of intermediate stiffness on the axial capacity of cold-formed steel back-to-back built up unequal angle sections", "Structures 32 (2021) (SCI), ISSN 2344-3219, PAGE NUMBERS: 827-848, impact factor 1.89.
- Dr RAJESH GOPINATH." Impact Of Chaotic Urbanisation On Bengaluru'S (India) Urban Avian Diversity", "Transylvanian Review of Systematical and Ecological Research (The Wetlands Diversity) 23, ISSN 2344-3219, PAGE NUMBER: 81-94, index by web of science
- Dr Deepak M S." Influence of intermediate stiffness on the axial capacity of cold-formed steel back-to-back built up unequal angle sections", "Structures 32 (2021) (SCI), ISSN 2344-3219, PAGE NUMBERS: 827-848, impact factor 1.89.
- Dr Deepak M S presented a paper entitled, "Strength enhancements in tensile properties of steel by press brake cold forming" in 1st International Conference on "Advances in Construction Materials and Management (ACMM 2021)", organized by Department of Civil Engineering, Department of Civil Engineering, SRM Institute of Science and Technology, Kattankulathur, in collaboration with Universiti Malaysia Sarawak (UNIMAS), Malaysia, held on 25th and 26st March 2021.
- Dr Deepak M S presented a paper entitled, "Estimation of probability on delay in desalination plant construction projects in Lakshadweep island" in 1st International Conference on "Advances in Construction Materials and Management (ACMM 2021)", organized by Department of Civil Engineering, Department of Civil Engineering, SRM Institute of Science and Technology, Kattankulathur, in collaboration with Universiti Malaysia Sarawak (UNIMAS), Malaysia, held on 25th and 26st March 2021.
- Vinod B.R, Shariq Fayaz , Vismaya S, Praveen Kumar D.S "Impact of nanomaterial on lake soil strength parameters and its application as subgrade an experimental analysis" Materials Today: Proceedings Elsevier . I S S N : 2 2 1 4 - 7 8 5 3 , <https://doi.org/10.1016/j.matpr.2021.05.170>, 25 June 2021.

Book Chapter:

- Dr Rajesh Gopinath has published a research article with the following citation: Gopinath R., Aishwarya M., Phanindra L.R., Clarina K., Kagawad

R.R., Ananya S.G. (2021) Reduction of Significant Aspects and Enhancement of Non-Significant Aspects for Hazardous Wastes in a Medical Electronics Manufacturing Firm. Integrated Approaches Towards Solid Waste Management. Springer, Switzerland, DOI: https://doi.org/10.1007/978-3-030-70463-6_19

International Conference:

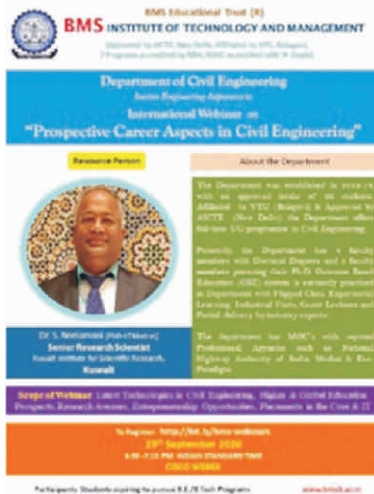
- Shobha R, Vinod B R , Vasantha , Vivek Vedant "The Influence of Infill Masonry Wall in RC Frames Subjected To Seismic Load for Sustainable Structure " IOP Conference Series: Materials Science and Engineering 955 (2020) 012024 IOP Publishing doi:10.1088/1757-899X/955/1/012024

FDP/Webinar Conducted:

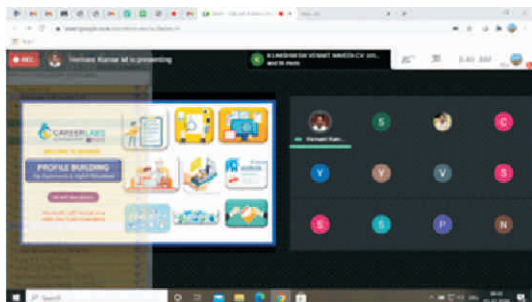
- On 25.09.2020, the Department of Civil Engineering in joint association with Aditya Birla UltraTech has organized a Webinar for all the passed out and current batches of Civil Engineering. The talk on "**Construction Technologies in Dubai - Opportunities and Challenges for Civil Engineers**" was rendered by Shri. Ashok Reddy (Regional Manager, UltraTech) and offered enlightenment on Introduction to modern Technologies in the Construction field, alongside Challenges, & Sensitization on Placement (Career) opportunities in Civil Engineering. The event was coordinated by Dr Rajesh Gopinath (Associate Professor & HoD, Department of Civil Engineering, BMSIT&M) . The platform was Google Meet and link is as follows: meet.google.com/eew-jrwy-xkq.
- **Engineer's Day Webinar:** Engineers Day was celebrated at BMSIT&M, on 15.09.2020. The event was coordinated by the Department of Civil Engineering. Er Munish Moudgil (IAS officer, IITB Alumni) who served the society by pioneering the Covid War room was the chief guest. The event was graced by Chairman, Principal,

Vice-Principal, HoD's and Faculty. On the occasion, Sri Munish Moudgil emphasized on the need for interdisciplinary knowledge in the Engineering education for serving the society. The engineer should be able to work towards the betterment of society in any possible way. The platform was CISCO WEBEX.

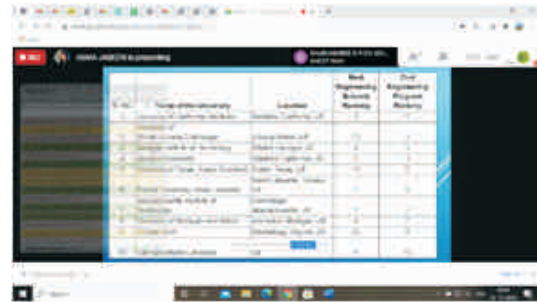
- The International Webinar on Prospective career aspects in Civil Engineering was held on 29.09.20 at 6.30pm. Dr.S.Neelamani, Senior research Scientist, Kuwait Institute for Scientific Research Kuwait was the expert speaker for the webinar. The webinar had focused on the origin of Civil Engineering to the latest technologies adopted. The expert speaker has also inspired the inputs for Global education prospects, Research Avenues, Entrepreneurship opportunities, placements in the core field and in the IT sectors. The platform was Google Meet . This webinar (as part of the Societal Outreach program) was part of the Webinar series organised by BMSIT&M to enlighten the potential students wanting to join for Engineering Courses
- On 21.11.2020, a Awareness Webinar was organised for 5th sem upon "Higher Studies Opportunities post-Covid wrt Civil Engineering". The webinar has been conceptualised to achieve the following objectives. Firstly, Sensitisation to the US Admission Process. Secondly Admission Process for Canada and essentially via these, Higher Studies Opportunities post-Covid wrt Civil Engineering. The session was engaged by Mr Srivasta Raja, Texas Review, Bengaluru. The webinar was initiated and coordinated by Dr Rajesh Gopinath (Assoc. Prof & HoD, Dept. of Civil Engineering).



- On 2.12.2020, an Awareness Webinar was organised for 5thsem upon "Career Profiling post-Covid wrt Civil Engineering". The webinar has been conceptualised to achieve the following objectives. Firstly, Career Directions and then Profiling. The session was engaged by Mr Hemanth and Mr Nitin, Byjus, Bengaluru. The webinar was initiated and coordinated by Dr Rajesh Gopinath (Assoc. Prof & HoD, Dept. of Civil Engineering).



- On 7.12.2020, an Awareness Webinar was organised for 5thsem upon "Higher Studies Opportunities post-Covid wrt Civil Engineering". The webinar has been conceptualised to achieve the following objectives. Firstly, Sensitisation to the US Admission Process. Secondly Admission Process for Canada and essentially via these, Higher Studies Opportunities post-Covid wrt Civil Engineering. The session was engaged by Mr Asma Jabeen, Texas Review, Bengaluru. The webinar was initiated and coordinated by Dr Rajesh Gopinath (Assoc. Prof & HoD, Dept. of Civil Engineering).

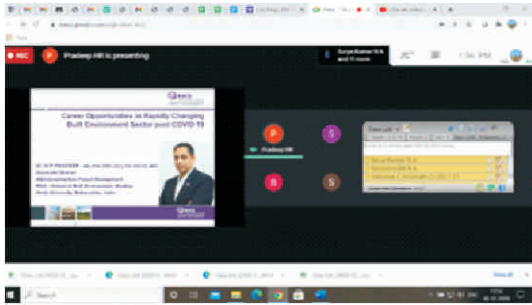


- On 7.12.2020, an Awareness Webinar was organised for 7thsem upon "Higher Studies Opportunities post-Covid wrt Civil Engineering". The webinar has been conceptualised to achieve the following objectives. Firstly, Sensitisation to the Aus/NZ Admission Process. Secondly Admission Process for Canada and essentially via these, Higher Studies Opportunities post-Covid wrt Civil Engineering. The session was engaged by Mrs Pranitha and Mrs Shashirekha, IDP, Bengaluru. The webinar was initiated and coordinated by Dr Rajesh Gopinath (Assoc. Prof & HoD, Dept. of Civil Engineering).



- On 8.12.2020, an Awareness Webinar was organised for 7thsem upon "Career opportunities in rapidly changing built environment sector post COVID 19". The webinar has been conceptualised to achieve the following objective wrt Sensitisation to the Career opportunities in Built Industry/Construction Industry. The session was engaged by Dr. HR Pradeep, RICS. The webinar was initiated and coordinated by Dr Rajesh Gopinath (Assoc. Prof & HoD, Dept. of Civil Engineering).
- On 8.12.2020, an Awareness Webinar was organised for 7thsem upon "Career opportunities in rapidly changing built environment sector post COVID 19".

The webinar has been conceptualised to achieve the following objective wrt Sensitisation to the Career opportunities in Built Industry/Construction Industry. The session was engaged by Dr. HR Pradeep, RICS. The webinar was initiated and coordinated by Dr Rajesh Gopinath (Assoc. Prof & HoD, Dept. of Civil Engineering.



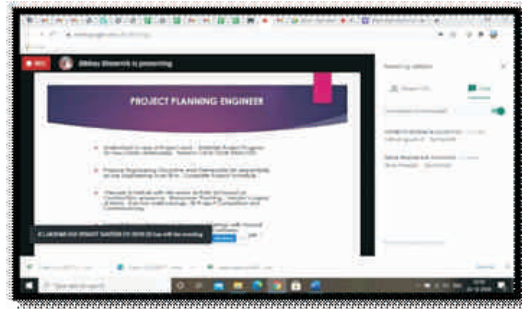
- On 22.12.2020, an International Webinar was organised for 3rd and 5th sem students upon "Industry opportunities as A Civil Engineer and Career Growth" webinar has been conceptualised to sensitise the students and motivate them to explore placement opportunities as a project engineer/planning engineer abroad. The session was engaged by Shri. Bibhas Bhowmik, Civil- Structural Engineering Consultant, Progetti Europa & Global Abu Dhabi, UAE. The webinar was initiated and coordinated by Dr Rajesh Gopinath (Assoc. Prof -PBL Coordinator & HoD, Dept. of Civil Engineering.
- One-week Faculty Development Programme on "CURRENT TRENDS IN CIVIL ENGINEERING – 21"] Department of Civil Engineering, BMSIT&M, Bengaluru, held on 19th to 24th April 2021. Around 80 participant's involved in FDP, Resource persons from both Industry and Academic Background. Coordinated by Dr Anupkumar G. Ekbote Assistant Professor Dr Deepak M. S. Assistant Professor Dr Rajesh Gopinath Associate Professor

Expert talk organized:

- Department of Civil Engineering organized an expert talk on the topic "Dampness in Foundation- Causes and Remedial Measures- Case Study " was

delivered by Er Sachin G V Deputy Senior Executive Asset Management – Commercial Embassy Group for 3rd semester students undertaking the course Building Materials and Construction on 18.11.2020.

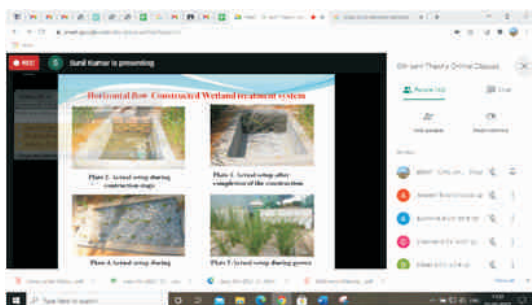
- On 1st January 2021, an Expert Talk on "Significance and Design Aspects of Constructed Wetlands" was organised for 5th sem students undertaking the subject Municipal Wastewater Engineering (18CV55). The talk has been conceptualised to sensitise the students and motivate them to explore Advanced Treatment Technologies beyond curriculum. The session was engaged by Dr Shashibushana HS, Manager-Environment, B.E.L. The webinar was initiated and coordinated by Dr Rajesh Gopinath (Assoc. Prof -PBL Coordinator & HoD, Dept. of Civil Engineering. The session was engaged via the GOOGLE-MEET link: <https://meet.google.com/abs-dmva-awi?authuser=0>



- An Industry Expert Talk on the topic "Safety Considerations in Construction Industry" was organized on 09.06.2021 for the Final year Civil Engineering Student's and the Students of 6th semester undertaking Open Elective 18CV653 (Occupational Health and Safety). The Expert Talk was delivered by Sri. Srikant S Nair, Head – EHS, Katterra Indian Pvt Ltd. The activity was coordinated by Dr Rajesh Gopinath.
- The Civil Club had organized an essay writing competition on "Are Smart Cities, Really Smart?" on 13th Nov 2020. The students were invited to send essays on the Gmail

(bmsitmcivilclub@gmail.com) by 13.11.2020. Five Students participated in the event from 3rd 5th and 7th Semesters. The participants who participated in the event were Faisal Fareed (1BY18CV0.15).S Dharshitha (1 by 16 cv 0 4 9), Likhith M (1by17cv025), Kavya K (1by18cv022) and Shaantanu Taarkeshwarsingh Chutoori (1by18cv065). The essays written by the students were well researched and discussed various parameters of smart cities from a technical point of view. Out of these 3 best essays written by Kavya K, Likhith M and Faisal Fareed were chosen for the reward.

- An Industry Expert Talk under ISTE Banner on the topic "Project life cycle-skills and tools" was organized on 17.07.2021 for the 6th sem Students 2018 Btch . The Expert Talk was delivered by : Er. Dinesh Mahendrakar. Project Engineer Bangalore International Airport Limited, Devanahalli, Bangalore. The activity was coordinated by Mr Vinod B R .
- An Industry Expert Talk on "Land Surveying and Challenges" was organised on 20/07/2021 for 4th semester students 2019 batch. . The Expert Talk was delivered by Ravi J, director Shikhar Builders and Developers Bangalore. The activity was coordinated by Dr Chandrashekarappa Agasanahalli.

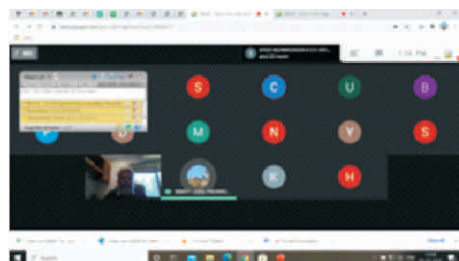
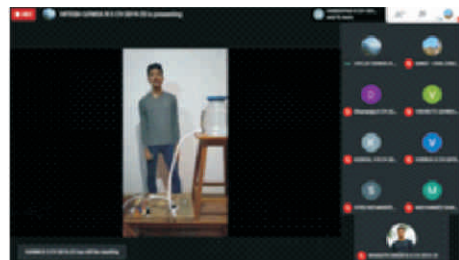


Open day :

- On 4.12.2020, Online Open Day was organized at Department of Civil Engineering, wherein the PBLs accomplished during Sept-Dec 2020 were exhibited online viz Google Meet

Platform. Students of 2nd year and pre-final year had participated in this Competition, wherein 28 projects were showcased; encompassing 12 from 3rdsem and 16 from 5th sem. The internal juries were Dr Deepak MS & Dr Anup Ekbote (Asst. Professors & Research Committee members, Dept. of Civil Engg.). Totally 15 projects were shortlisted based on Rubrics of Evaluation (provided at Centralized/Institutional level). The evaluation started at 10:15 am and continued until 6 pm IST.

- On 7.12.2020, the shortlisted 15 projects were further subjected to scrutiny by External Reviewer, Shri Er Narayan Gowda, Vice-president, Legacy Groups. The assessment was coordinated by Dr Deepak and Dr Anup. The online evaluation was conducted through Google meet at the following link.



Fresher's Party :

- The purpose of Fresher's Party is to welcome new students in a friendly atmosphere and to encourage their creative impulses to boost their confidence. It is the day where seniors and juniors finally bond and unite to celebrate being part of the college. The fresher's day was initiated by cutting a cake .Senior students arranged many activities for fresher's which include cultural events where everyone got

chance to showcase their talent. Even the seniors indulged in various fun-filled activities Refreshments were served at the end of the program.

- Department of Civil Engineering organized a PBL Project Review on 30th and 31 st July 2021 to exhibit the project work carried out by the students of the IV and VI semester students. The projects exhibited the student's ability to apply their learning to solve the real world problems.
- This semester around 33 PBL batches chose the Civil Engineering Problems Based Projects and Innovative Solutions for the same through technical and smart methods. These projects were evaluated by internal committee on various rubrics Students of 2018 batch (6th semester) organised Farewell day for out going 2017 batch.



Research Proposals granted:

- The Research Work titled "Design of a novel-smart Prototype for the removal of Suspended Particulate Matter, for improving Indoor Air Quality" has been sponsored by "SCINDIA

CONSTRUCTIONS" with an External Project Funding of INR 5000.00 (**Indian Rupees Five Thousand only**), carried out by Dr DEEPAK M S (PI) and Dr RAJESH GOPINATH (CoPI), at Department of Civil Engineering, BMS Institute of Technology and Management, Bengaluru- 560064.

- The Final-year Research Work titled "Soil moisture retention enhancement using Fenugreek" has been sponsored by "KARNATAKA RAITHA SANGHA" with an External Project Funding of INR 5000.00 (Indian Rupees Five Thousand only), carried out by Dr RAJESH GOPINATH (PI), Mr Bhuvan, Mr Likhit, Mr Akash and Mr Ranuvadatta Kailash (Students-CoPI), at Department of Civil Engineering, BMS Institute of Technology and Management, Bengaluru- 560064.

FDP /Workshops/STTP attended (Faculty):

- Dr. Chandrashekarappa Agasnalli, Assistant Professor, Department of Civil Engineering, Participated in ESRI India User Conference 2021 held online on 28 th and 29 th July 2021.
- **Dr Chandrashekarappa Agasnalli**, Assistant Professor, Department of Civil Engineering Has Participated in 21 days (13.07.2020 to 2.08.2020) online training program in **GIS using QGIS** conducting by Central University, Gulbarga.
- Dr Rajesh Gopinath (Associate Professor & HoD, Dept. of Civil Engineering & Key Liaison-OIKOS) have participated in the 5 days Faculty Development Programme on "Insights into Marine Biodiversity and Taxonomy", organized by the Centre for Climate Change Studies, Sathyabama Institute of Science and Technology, Chennai from 10.08.2020 to 14.08.2020.
- Vinod B R, Assistant Professor, Department of Civil Engineering Has Participated Five Days Faculty Development Program on "**Construction and Geoinformatics**" Organized by Department of Civil Engineering in Association with Indian Concrete

Institute - Bengaluru Centre, Vemana Institute of Technology, Bengaluru, held Between 3.08.2020 to 7.08.2020.

- Vinod B R , Assistant Professor, Department Of Civil Engineering has participated in the International Workshop "Climate Change impact on Water Resources Systems (CCIWRS 2020)"organized by Department of Civil Engineering, National Institute of Technology Silchar Assam sponsored by TEQIP-III in association with IIC, NIT Silchar Assam from 12.09.2020 to 02.11.2020.
- Vinod B R, Assistant Professor , Department of Civil Engineering , B M S Institute of Technology and Management Attended AICTE Sponsored one week Short Term Training Program on "Waste water the untapped Resource for next generation " Organized by Department of Civil Engineering , BLDEA's V P Dr PG Halakatti College of Engineering & Technology , Vijayapura, Karnataka held Between 2.11.2020 to 7.11.2020.
- Vinod B R, Assistant Professor , Department of Civil Engineering , B M S Institute of Technology and Management Attended under AQIS sponsored Six Days Online Short Term Training Programme " Intellectual Property for Engineers & Scientists" - Phase 1 " Organized by Department of Basic science and Humanity , CMR Institute of Technology Karnataka held Between 9.11.2020 to 14.11.2020.
- Dr Rajesh Gopinath, Assoc Prof & HoD, Dept. of Civil Engineering, BMSIT&M, has participated in One Week Online *Short-Term Training Programme* on *"Control Air Pollution - Defer Climate Change" sponsored by All India Council for Technical Education (AICTE), New Delhi, organised by Department of Civil Engineering is organizing, "BLDEA's V P Dr P G Halakatti college of Engineering & Technology, Vijayapur", from 21.12.2020 to 26.12.2020.
- Dr Chandrashekarappa A, Assistant Professor, Department of Civil Engineering Participated in 1 week FDP program on "Recent Trends in Renewable Energy Sources", conducted by Rajarshi Shahu Maharaj Polytechnic, Nashik, Maharashtra from 1.2.2021 to 6.2.2021.
- Dr Chandrashekarappa A, Assistant Professor, Department of Civil Engineering Participated in 1 week FDP program on "Functional Materials for Engineering Applications conducted by BMSCE Bangalore from 15.2.2021 to 19.2.2021.
- Dr Chandrashekarappa A, Assistant Professor, Department of Civil Engineering Participated in One Day workshop on "Water Resource Management Using Geo-Spatial Technology" conducted by Rajarshi Shahu Mahavidyalaya (Autonomous), Latur, Dist.-Latur on 18.2.2021.
- Dr Rajesh Gopinath ,Associate Professor Department of Civil Engineering Attended One week AICTE ATAL FDP on "Green Building & Built Environment" organized by Indian Green Building Council (IGBC) & Confederation of Indian Industry (CII) from 31.05.2021 to 04.06.2021.
- Dr Rajesh Gopinath (Assoc. Professor, Dept. of Civil Engineering) has attended 1 week ICT Mode STTP on "Skill Assessment in Laboratory and Workshop Classes", from 07/06/2021 to 11.06.2021. The FDP was organised and conducted by Training Cell, Academic Affairs, NITTTR, Kolkata (NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH).
- Dr. Rajakumara H N, Professor & HoD, Department of Civil Engineering Attended One week AICTE ATAL FDP on "Green Building & Built Environment" organized by Indian Green Building Council (IGBC) & Confederation of Indian Industry (CII) from 31.05.2021 to 04.06.2021.
- Dr Rajesh Gopinath (Assoc. Professor, Dept. of Civil Engineering) has attended 1 week ICT Mode STTP on "Skill

Assessment in Laboratory and Workshop Classes", from 07/06/2021 to 11.06.2021. The FDP was organised and conducted by Training Cell, Academic Affairs, NITTTR, Kolkata (NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH).

- Shimna Manoharan has completed One Week Short Term Training Programme through ICT Mode on Settlement & Bearing Capacity Analysis of Shallow Foundations organised by NITTTR, Kolkata from 14th June to 18th June, 2021 successfully.
- Dr. Rajakumara H N, Professor & HoD, Department of Civil Engineering Attended a one day webinar on "South Asian Youth Sustainable Development Virtual Dialogue (SAYSDVD) -2021 organized by Punjab Energy Development Agency on 05.06.2021.
- Dr Rajesh Gopinath (Assoc. Professor, Dept. of Civil Engineering) has attended webinar on "River Rejuvenation: Challenges to Civil Engineers", on 13.06.2021. The 1 day webinar was organised by Dept. of Civil Engineering, VKIT, Bengaluru-74.
- Anthony Raj, Assistant Instructor, Department of Civil Engineering attended STTP on " Latest Innovations and Technological Advancements in Concrete Technology " from 2.11.2020 to 7.11.2020 at Department of Civil Engineering, SECT, Kalasalingam Academy of Research and Education, Krishnankoli.
- Anthony Raj, Assistant Instructor, Department of Civil Engineering attended STTP on " Latest Innovations and Technological Advancements in Concrete Technology " from 23.11.2020 to 28.11.2020 at Department of Civil Engineering, SECT, Kalasalingam Academy of Research and Education, Krishnankoli.
- Anthony Raj, Assistant Instructor, Department of Civil Engineering attended online Faculty Development programme on " Renewable Energy " from 14.12.2020 to 18.12.2020 at Poornima College of Engineering, Jaipur, Rajasthan.
- Vinod B R ,Assistant Professor, Department Of Civil Engineering has Participated One week Faculty Development Program on "Recent Advances in Composite Materials For Engineering Applications" Organized by Department of Mechanical & Civil Engineering, BMSCE, in association with F.E.T. M.J.P. Rohilkhand University, Bareilly, during 8.03.2021 to 12.03.2021.
- Dr Chandrashekarappa A ,Assistant Professor, Department Of Civil Engineering has Participated in **Virtual IIRS Academia Meet (VIAM) - 2021** on "**Technological Trends in Capacity Building for Disaster Management Support**", conducted by IIRS - ISRO on 16.03.2021.
- Dr Chandrashekarappa A ,Assistant Professor, Department Of Civil Engineering has Participated in **Virtual National Seminar on "Recent Trends in Advance surveying"**, conducted by PSN College of Engineering and Technology, on 24.03.2021.
- Participated in **Online Workshop on "Geotechnical and Geological Investigation case studies"**, conducted by NITK Surathkal, on 25.03.2021 and 26.03.2021.

Open course

- Advanced Surveying Using Total Station, ESurveying and Drone 1st June to 5th June 2021. Coordinator – Dr Chandrashekarappa Agasnalli and Dr Anupkumar G Ekbote)
- "Revit Architecture for Beginners " which saw participation of 66 students in collaboration with M/s Medini – AutoDesk authorised Training Center , dated 1th June 2021 to 6 th June 2021 from 9:00am to 4.30pm Through online , The course was coordinated by Mrs.Shobha R and Mr. Vinod B R, All the session were engaged by resource person from Medini – AutoDesk authorised Training Center and coordinators.

KSCST has selected three UG student project for funding for the 44th series of Student Project Programme

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

MOUS / AWARDS / RECOGNITIONS

MOU:

- An inauguration of Industry associated Lab with Indian TechKeys was held on 23.10.2020. Dr Usha B A, Associate Professor, Dept. of CSE coordinated this initiative.
(MoUs signed with Indian TechKeys and BMSIT&M on 23.10.2020, Coordinated by Dr Usha B A, Associate Professor, Dept. of CSE)
- MoUs signed with Nihon Communication System Pvt. Ltd and Dept. of CSE, BMSIT&M on 23.11.2020. Coordinated by Dr.Usha B A, Associate Professor, Dept of CS

Session Chair:

- Dr. HemaMalini B H, Associate Professor and Head, Dept of CSE was a session chair for Track 3 at "7th International Conference on Advanced Computing and Communication Systems- (ICACCS-2021)" held online hosted by Sri Eshwar College of Engineering Campus, Coimbatore, Tamil nadu, INDIA during 19.03.2021 and 20.03.2021.
- Dr. Thippeswamy G, Professor , Dept. of CSE was Nominated by Visvesvaraya Technological University (VTU) Belagavi for the Selection Committee Panel for Faculty Selection at Don Bosco Institute of Technology, Bangalore during 08.03.2021 to 13 03. 2021.
- Dr. Thippeswamy G, Professor , Dept. of CSE was Observer of Peer Team Visits of National Assessment and Accreditation Council (NAAC) to Thrissur – 680566, Kerala during 12.03.2021 to 14 03. 2021
- Dr. Thippeswamy G, Professor , Dept. of CSE was Adjudicated the PhD thesis of SRM University(Department of Computer Science & Engineering) during March 2021
- Dr. Usha B A, Associate Professor is appointed as Deputy Chief Controller(External) by Visvesvaraya

Technological University (VTU) for the conduction of VTU Theory examination March 2021.

- Dr. Usha B A, Associate Professor, Dept of CSE was session chair for the 3rd International Conference on Advances in Computing & Information Technology (IACIT- 2021) on 17.05.2021 & 18.05.2021 organized by REVA University, Bengaluru.
- Dr. Anil G.N, Professor, Dept of CSE was session chair for the 3rd International Virtual Conference on "Advances in Computing & Information Technology (IACIT- 2021)" on 17.05.2021 & 18.05.2021 organized by School of CSE and School Computing & Information Technology , REVA University, Bengaluru.
- Dr. Arunkumar B.R, Professor, CSE chaired a session in Two Day "International Conference on Emerging Trends in Computer Science & Technology (ICETCST-2021)", organized by the College of Computer Science and Information Science, Srinivas University, Pandeshwar, Mangaluru, Karnataka, India held on 18.06.2021 & 19.06.2021.

BOE:

- Dr. Arunkumar B.R , Professor, CSE, Chairman, BoS,VTU MCA programme attended joint BoS meeting in VTU, Belgavi on 05.02.2021.
- Dr. Arunkumar B.R. Professor, Chairman, BOS, VTU MCA programme attended the joint BOS meeting chaired by the Vice chancellor. held on 31.05.2021
- Dr. Thippeswamy G , Professor, Dept. of CSE Attended the Board of Studies Meeting (Online) for the Boards of CSE/ISE/AIML at Visvesvaraya Technological University, Belagavi on 08.05.2021
- Dr. Thippeswamy G , Professor, Dept. of CSE Attended the Board of Studies Meeting (Online) for the department of CSE/ISE/AIML at New Horizon College

of Engineering, Bangalore on 08.05.2021

- Dr.Arun kumar B.R. Professor, CSE, chairperson, BOS, VTU-MCA programme attended as a member of the NEP expert Committee meeting chaired by Honorable Vice-Chancellor, Dr.Karisiddappa on 20.07.2021 and 27.07.2021.
- Dr. HemaMalini B H, Associate Professor, Dept of CSE, rendered her service as a Jury member for the project exhibition/presentation of final year students, conducted by Department of ISE, Sri Venkateshwara College of Engineering, Bangalore on 22.7.2021
- Dr.Arun kumar B.R. Professor, CSE, convened the Ph.D. comprehensive viva examination on 17.07.2021 of the research scholar, Ms.Komala R,VTU-RC, BMSIT&M.
- Dr. Usha B A, Associate Professor, Dept. of CSE delivered a Talk on "Security approaches in Blockchain using Machine Learning Algorithms" on 18.08.2020 in AICTE ATAL sponsored One week FDP on Blockchain Technology organized by Dept. of Information Technology, MepcoSchlenk Engineering College, Sivakasi on 17.08.2020.to 18.08.2020.
- Dr. Sunanda dixit, Associate Professor, Department of CSE has delivered an Expert talk on "Introduction to Data Science" on 04.08.2020, at EWCE, Bengaluru.
- Srivani. P, Assistant Professor, CSE has delivered a lecture on "Sensors in Agriculture" as a resource person on 22.09.2020 for the AICTE Training and Learning (ATAL) Sponsored 5 days online Faculty Development Programme on "The World of Wonderful Sensors, during 21.09.2020 25.09.2020 organized by Department of Telecommunication Engineering, Dr.Ambedkar Institute of Technology, Bengaluru-560056.
- Prof. Muneshwara M S , Assistant Professor, Dept. of CSE has delivered a lecture on "Blockchainechnologies in Distributed Networks" on 18.09.2020 for the employees of Netanza Innovation Pvt. Ltd, Bengaluru.
- Dr. Usha B A, Associate Professor, Dept of CSE has extended their support as Resource person for delivering the talk on "Cyber Security" for the students of MarutiVidya Kendra, on 19.11.2020, Tumkur
- Dr. Usha B A, Associate Professor, Dept of CSE has extended their support as Resource person for conducting the workshop on "Cyber Security" for the students of Air Force School, on 24.11.2020 Hebbala, Bengaluru-560032.
- Dr. Arunkumar B.R , Professor, CSE, has extended his support as Resource person for ATAL online FDP by Jawaharlal Nehru National College of Engineering (JNNCE) from 01.02.2021

Faculty As Resource Person:

- Ashwini N., Assistant Professor, Department of CSE has extended their support as Resource person for "Advances in Data Analytics" on 12.08.2020 for 5 day online Faculty Development Programme on "Trends in Data Analytics" at Department of ISE, BMSIT&M.
- Dr. Manoj H M, Assistant Professor, Department of CSE has shared his valuable knowledge as a speaker during Webinar on "Agile - A framework for managing software development process", on 12.08.2020 at EWCE, Bengaluru.
- Dr. Usha B A, Associate Professor, Dept. of CSE delivered a Talk on "Awareness on Cyber Security" on 10.08.2020.in Online Webinar organized by Dept. of CSE, Vidyavardhaka College of Engineering, Mysore
- Dr.Usha B A, Associate Professor, Dept. of CSE delivered a Talk on "AI in Cyber Security" in Two Day Workshop on Artificial Intelligence& its application: A practical approach organized by Dept of CSE, Vidyavardhaka College of Engineering, Mysore.

to 05.02.2021, at JNNCE, Shivamogga.

- Dr. Arunkumar B.R , Professor, CSE, has delivered an expert talk on “OBE principles and implementation for engineering and postgraduate programmes” organised by Bangalore Institute of Technology, on 09.02.2021.
- Dr. ArunkumarB.R , Professor, CSE attended Doctoral committee meeting at NMIT, Bangalore on 12.02.2021.
- Dr. Thippeswamy G, Professor , Dept. of CSE was Delivered invited talk on “Legal Aspects of E-governance” for the Class-I Officers at District Training Institute (DTI) Belagavi, organized in association with Center for e-Governance, Government of Karnataka on 24.2.2021
- Dr. Thippeswamy G, Professor , Dept. of CSE was Delivered two special lectures on “Significance of Assessment for Quality in Higher Education and Key indicators” during One-Day Workshop on “Assessment and Accreditation of Colleges – A Road Map” organized by IQAC and CDC of Vijayanagar Sri Krishnadevaraya University, Bellary on 25.2.2021
- Prof. Muneshwara M S , Assistant Professor Dept. of CSE has delivered a expert talk on “ Web Technology & Its Application usage in real World ” on 15.02.2021 at Govt. First Grade College & PG Centre, Doddaballapura,
- Prof. Anand R , Assistant Professor Dept. of CSE has delivered a expert talk on “ Software Development Lifecycle in IT Company ” on 27.03.2021 at Govt. First Grade College & PG Centre, Doddaballapura,
- Dr. Bhuwaneshwari M , Professor & HOD, Dept. of CSE has released a book called “ManjiRava Fry” in the Institute of Political Studies, Bengaluru on 04.04.2021.
- Dr. Thippeswamy G ,Professor, Dept. of CSE Conducted one-day orientation Workshop on “NAAC Accreditation Process and Procedures” for the faculty members organized by SaiVidya Institute of Technology, Bangalore on 06.04.2021.
- Dr. Thippeswamy G ,Professor, Dept. of CSE Delivered an invited talk on “Assessment and Accreditation of Colleges – A Road Map” for the members of Core Committee of NAAC at Maharani Lakshmi Ammanni College Bangalore on 15.4.2021.
- Dr. Thippeswamy G , Professor, Dept. of CSE Resource Person for Training the Faculty members of Government Engineering Colleges during 18.05.2021 to 22.05.2021 , Invited by the Department of Collegiate and Technical Education, Government of Karnataka for training the faculty members of selected Government Engineering Colleges of Karnataka for NBA.
- Dr. Thippeswamy G. , Professor, Dept. of CSE Delivered a talk on *Cyber Laws: IT Act 2000* in 6-days AICTE-ISTE funded Induction / Refresher program (Second Phase) on 'Next Generation Wireless Communication: 5G & Beyond' during 03.05.2021 to 08.05.2021 organized by the Department of Electronics & Communication Engineering K.S Institute of Technology, Bangalore
- Dr. Thippeswamy G , Professor, Dept. of CSE Delivered an Expert Lecture on the "*Emerging trends in Computer Science and Engineering*" for our First-Year Engineering Students during the Induction Programme (Phase - II) at Govt SKSJTI on 11.05.2021, Bangalore as a Part of AICTE and VTU norms.
- Dr. Hema Malini B. H. , Associate Professor, Dept of CSE delivered a webinar on "Introduction to Machine Learning", on 28-5-2021 between 12.00pm to 1 pm for the students of Brindavan College of Engineering, Bangalore.



- Dr. Arunkumar B.R. Professor, delivered a webinar on the topic "Blockchain, Smart contracts and its Applications" to the faculty members during 01.05.2021 organised by the Srinivasa University, Mangalore.
- Dr. Arunkumar B.R. Professor, delivered a webinar on the topic "Avoiding Double spending problems and its use cases" as a part of the 10th series of Jnaanavardhana during 26.05.2021 a unique programme of BMSIT&M.
- Dr. Arunkumar B.R. Professor, delivered a webinar on "Ethical Issues and Plagerism Checking in Research Papers" during 06.05.2021 organized by Sri JagadguruRenukacharya college of Science, Arts and Commerce, Bengaluru.
- Dr. Usha B A, Associate Professor, Dept of CSE has delivered a talk on "Current Trends in Intellectual Property Rights" on 26th May 2021 organized by Dept of ISE, Malnad College of Engineering, Hassan.
- Prof. Ashwini N., Assistant Professor, 3 days Add-on Program on the topic "Concept of JAVA" to the IEEE Students under IEEE Student Chapter from 22.05.2021 to 24.05.2021 at The Oxford College of Engineering , Bangalore.
- Prof. Ashwini N. , Assistant Professor, Resource Person on the topic "Introduction to Machine Learning" for PERU Students on 26.05.2021 at University Nacional Mayor de San Marcos, PERU, South America.
- Dr. Dhanalakshmi, Assistant Professor, Department of cse has extended their support as Resource Person on the topic "Robotic Process Automation Using UIPATH" on 24-06-2021 at Jain college of engineering and technology, Hubballi.
- Dr. Usha B A, Associate Professor, Dept of CSE has delivered a talk on "Deep Learning for Smart Agriculture" in Five Days Online Faculty Development Program on "Industry 4.0: Applications of Deep Learning and Artificial Intelligence in Computer Vision"

organized by Dept of Information Technology, St. Joseph's Institute of Technology, OMR, Chennai -119 during 20.07.2021 and 24.07.2021

- Dr. Dhanalakshmi B K, Assistant Professor, Dept of CSE has delivered a talk on "Power of Linux OS in Recent Trends" in Webinar, RNS Institute of Technology , Bangalore on 23.07.2021

Faculty Awards:

- Mrs. Radhika K R, Assistant Professor, CSE defended her Ph.D thesis titled "Efficient Algorithms to Extract Subspace Information in High Dimensional Data", under the guidance of Dr.Thriveni J, UVCE, Bangalore University, on 5th September 2020.



- Dr. Thippeswamy G, Professor , Dept. of CSE was Successfully Completed the "**Post Graduate Diploma in Cyber Laws and Cyber Forensics**" from National Law School of India University, Bangalore with A+ Grade during MARCH 2021.

Provisional Transcript			
	Name: Thippeswamy G ID No. CLCF/1131/19		
Particulars	Max Marks (100)	Grade	Month & Year of Exam
P1-Introduction to Law & Legal Systems	50	B	July 2020
P2-Cyber Technology, Cyber Wrongs & Cyber Laws	80	O	July 2020
P3 -Law of Cyber Crimes and Cyber Forensics	67	A+	July 2020
P4 - Legal Aspects of Cyber Space	65	A+	July 2020
Dissertation	Written (80)	Viva (20)	Total (100)
	69	15	84
		O	Jan 2021

- Dr. Dhanalakshmi B K, Asst. Prof, Dept. of CSE was awarded PhD Degree from VTU, Belgaum on 03.04.2021
- Dr. HemaMalini B. H. Associate Professor, Department of CSE was



invited as a Chief Guest at a special event RE-PRO Record Making Program, by SMART KIDS, an ISO certified Educational Institution, organized at Sri SaiVidyaShala, Kolar on 31.12.2021, Sunday at 9.30 am.



Reviewer For Journal / Conference:

- Prof. Muneshwara M S, Assistant Professor, Dept. of CSE was a reviewer for International Conference on Machine Learning and Applied Network Technologies. 2020 (ICMLANT2020) on August 2020
 - Dr. Usha B A, Associate Professor, Dept of CSE Working as Editorial board member for CR Journals, CR SUBSCRIPTION AGENCY SE - 569, Shastri Nagar, Ghaziabad - 201002 (UP) on August 2020.
 - Dr. HemaMalini B H, Associate Professor, Department of CSE was a reviewer for the Scopus Indexed Journal -" Journal of The Institution of Engineers (India): Series B", Sept-2020
 - Dr. HemaMalini B H, Associate Professor, Department of CSE was a reviewer for the conference- " The2nd International Conference on Machine Learning and Intelligent Systems (MLIS 2020)", hosted at South Korea. Sept-2020
 - Dr. Usha B A Associate Professor, Dept of CSE is working as Technical Program Committee Member for 15
- INDIACOM, 2021 8th International Conference on Computing for Sustainable Global Development Organized by BharathiVidyapeeth, New Delhi, Sept-2020.
 - Dr. Arunakumari B N, Assistant Professor, Department of CSE was a reviewer for Elsevier Materials Today: Proceedings Journal. during November 2020.
 - Dr. Arun Kumar B.R , Professor, CSE was a reviewer for Journal of Education (Scopus indexed), Boston University USA during Feb 2021.
 - Dr. Usha B A, Associate Professor, CSE is working as Editorial board member for CR Journals, CR SUBSCRIPTION AGENCY, Shastri Nagar, Ghaziabad - 201002 (UP). During Feb 2021.
 - Dr. Usha B A, Associate Professor, CSE is working as Editorial board member for DECENT Journals, DECENT Database Brisbane, Queensland, Australia, During Feb 2021.
 - Dr. Usha B A, Associate Professor, CSE is working as Editorial board member for Journal of Information Technology and Sciences, MAT Journals During Feb 2021.
 - Dr. Usha B A, Associate Professor, CSE is working as Editorial board member for Journal of Telecommunication Study, MAT Journals During Feb 2021
 - Dr. Usha B A, Associate Professor, CSE is working as Editorial board member for Journal of Optical Fibre Communications, MAT Journals During Feb 2021
 - Dr. Usha B A, Associate Professor, CSE is working as Editorial board member for Journal of Communication Engineering and its Innovations, MAT Journals During Feb 2021
 - Dr. Usha B A, Associate Professor, Dept. of CSE has reviewed the paper for "Journal of Telecommunication Study" under MAT Journal during March 2021.
 - Dr. Archana R A, Assistant Professor, CSE was a reviewer for 16th International Conference on Information Processing organized by UVCE, Bangalore. during May 2021

- Dr. Dhanalakshmi B K , Assistant Professor, CSE was a reviewer for 16th International Conference on Information Processing organized by UVCE, Bangalore during May 2021.
- Dr. Arunakumari B. N, Assistant Professor, CSE was a reviewer for Indian Journal of Science and Technology, published by Indian Society for Education and Environment during May 2021.
- Dr. Usha B A, Associate Professor, Dept of CSE has reviewed three papers for the Springer Journal on Multimedia tools and applications which is Scopus and ACM Library Indexed during May 2021.
- Dr. Lakshmi B N , Assistant Professor, CSE was a reviewer for 16th International Conference on Information Processing organized by UVCE, Bangalore. during May 2021.
- Dr. Sunanda Dixit, Associate Professor, Department of CSE was a reviewer for Talor and Francis Journal during June 2021.
- Dr. Dhanalakshmi B K, Assistant Professor, Department of CSE was a Reviewer for S N Computer Science Journal, Publisher Springer during June 2021.
- Prof. Ashwini N, Assistant Professor, Department of CSE was a reviewer for 16th International Conference on Information Processing (ICInPro-2021)-Proceedings Published in Springer during June 2021.
- Dr. Hema Malini B H, Associate Professor, Dept of CSE was a reviewer for Journal of The Institution of Engineers and reviewed a paper entitled "Assessment of Long Short-Term Memory Network for Quora Sentiment Analysis" during June 2021.
- Dr. Usha B A, Associate Professor, Dept of CSE as an Editorial Member of "Journal of Communication Engineering and its Innovations" reviewed the paper for MAT Journal June 2021.
- Dr. Usha B A, Associate Professor, Dept of CSE has reviewed three papers for the Springer Journal on Multimedia tools and applications which is Scopus

and ACM Library Indexed during June 2021. Dr. HemaMalini B H, Associate Professor, Dept of CSE chaired a session in National E- Conference on "New Advances in Computing and communication Technology (NACCT - 2021)" Conducted on 12.07.2021 and 13.07.2021 through Online Platform by the Department of Computer Science and Engineering, Cambridge Institute of Technology.

- Dr. Usha B A, Associate Professor, Dept of CSE has reviewed three papers for the Springer Journal on Multimedia tools and applications which is Scopus and ACM Library Indexed during July 2021.
- Dr. Hema Malini B H, Associate Professor, Dept of CSE has reviewed a paper for Journal of Institute of Engineers, Series B Journal during July 2021.

Collaborative Research:

- Dr. Sunanda Dixit, Associate Professor, CSE department, was involved in the collaborative research with IBM Research Lab, and successfully completed the project mentoring for 4 students. Duration of the project is 4 months. Students have received the Internship completion certificate under her guidance. Sept 2020.

WORKSHOPS / FACULTY DEVELOPMENT PROGRAMMES / FESTS

Students Workshop conducted/organised:

- Department of CSE has conducted a hands-on workshop on " Playing with Python codes " on 27.10.2020 from 5 PM to 6 PM in association with CSI S p e a k e r S a n d e e p Kumar. There were around 35 participants from BMSIT &M.



FDP CONDUCTED/ ORGANISED:**FDP/webinar Conducted/ Organised:**

- Dr. Hema Malini B H, Associate Professor organised a webinar on "Industry 4.0 Employers Expectation", Tuesday, 08.12.2020 3:00 pm, conducted by ICT Academy, Speaker: Sindhukalyanasundaram, Organizational Development and Leadership Coach. for all the students of BMS Institute of Technology and Management.
- Dept. of CSE has organised a Five Days Online FDP on "Emerging Trends in Data Analytics" from 10.05.2021 to 14.05.2021. Coordinated by Dr. Usha B A along with organising committee members, Dr.Arunakumari B. N, Prof.Ravikumar B. N of Dept of CSE, BMSIT&M.

About the Institute
BMS Institute of Technology and Management was established in the year 2002 under the support of BMS Educational Trust with the motto of establishing a premier technical institute up to world class standards. It is recognized by AICTE, Government of India and is affiliated to VTU, Bangalore. BMSIT&M offers B.Tech. and other PG programs along with M.Tech. courses for UG programs and PG programs have been awarded by NBA, BMSIT&M has received "A" Grade from NBA. BMSIT&M is the first institute in providing distance education and Massive Learning in UG programs. Our guest lecturers awarded the title "National Leader" of BMS Group International have B.Tech. in system administration, highly qualified faculty members and strict industry programs, the institute has been recognized as an Emerging Technical Institute in the state of Karnataka by VTU, Government of India. Chairman of Committee of Institutions has placed BMSIT&M among top ten institutes in India for the "TEC21 Challenge to Lead" award. The institute strives to make the best overall development through both academic and co-curricular activities.

Institute Vision
To emerge as one of the finest technical institutions of higher learning, to develop engineering professionals who are technically competent, ethically and entrepreneurially ready for tomorrow's world.

Institute Mission
Acquire high quality academic instruction, innovation and industry-relevant expertise.

Chief Patron:
Dr. R. R. Rajaji Narayan
Dr. P. Deyasudha Patil
Dr. M. Mahesh Kumar D. IAS (Retd.)
Dr. Anurag Sharma

Patrons:
Dr. Mahesh Babu G. H.
Dr. H. N. Srinivasan

Organizing Chair:
Dr. Shivamurthy D. H.
Co-ordinator:
Dr. Asha B. A.
Co-ordinator:
Dr. Shivamurthy D. H.

Organizing Committee:
Dr. Aruna Kumar B. N.
Prof. Ravi Kumar B. N.

BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT
Dharmapuri, New Road, Bengaluru, Karnataka, Bangalore, India

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FIVE DAYS FACULTY DEVELOPMENT PROGRAMME ON
EMERGING TRENDS IN DATA ANALYTICS
10th - 14th MAY 2021
ORGANIZED BY
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
In Association with

Seminars / Expert Talks

- The Department of CSE organised the Online Alumni session on the topic "Live Q&A, Session on Mentor Introduction" by Mr. Pranav Rai Kote!, Alumni of CSE 2020 batch for the BMSIT&M students on 20.09.2020.
- The Department of CSE organised the Online "International webinar on Scope and Trends in CSE/ISE" on 30.09.2020. National Speaker for the Webinar was Mr. P B Kotur, Head - Global Fresher's Engagement Program Wipro Limited, Bengaluru coordinated by Dr.Usha B A, Associate Professor, Dept. of CSE. by Mr. Venkatesh Babu, Sr. Technical Leader, CISCO Systems,

San Francisco Bay Area, coordinated by Dr. HemaMalini B H, Associate Professor, Department of CSE was instrumental in getting the international speaker.

BMS Educational Trust
BMS Institute of Technology and Management
Yelahanka, Bengaluru-64

INTERNATIONAL WEBINAR ON
SCOPE AND TRENDS IN COMPUTER SCIENCE AND INFORMATION SCIENCE
Organised by
Department of CSE and ISE

Speakers

Venkatesh Babu
Sr. Technical Leader, Cisco Systems
San Francisco Bay Area

P. B. Kotur
Head - Global Freshers Engagement Program, Wipro Limited

Scope of Webinar
The presiding career awareness to aspiring engineering students and insights on the importance of engineering education in Computer Science and Information Science streams. Webinar highlights the significance of program in system building, recent advances, job, higher education and research opportunities along with entrepreneurial skills.

Registration Link
<http://bit.ly/bmsit-webinars>

Date: 30th Sept 2020
Session 1 - 10:00AM(IST) Session 2 - 11:00AM (IST)

Participants: Students aspiring to pursue REE/Tech Programs

- The Department of CSE organised the Online National Level Webinar on National Education Policy, Theme: Future of Higher Education in India - Turning Challenges into Opportunities, Organised by BMS Institute of Technology and Management in association with BMS Educational Trust, on 25.09.2020, Schedule Time: 3.00 PM. by Dr.M.K.Sridhar, Member of NEP drafting committee, Member of UGC, President CESS, Bengaluru. Coordinated by Dr. Sunanda Dixit, Associate Professor, Dept. of CSE.
- Department of CSE organized an expert talk/Online Webinar on the topic "Preparedness for Campus Placements" for the CSE students on 24.10.2020 from 10.a.m - 12.30 p.m by Mr.SahilVerma, Software Development Engineer at TALLY SOLUTIONS., Alumni 2019 Batch. Coordinated by Prof. Shruthi J & Prof. Muneshwara M S.
- Department of CSE organized an expert talk/Online Webinar on the topic "Aerial Humanoid Robotics" by Professor Daniele Pucci, head of the Dynamic Interaction Control (DIC) lab at the IstitutoItaliano di Tecnologia (IIT). DIC Lab is pioneering Aerial Humanoid Robotics, a new branch of Robotics envisioning jet-powered flying humanoid robots during October 2020.

- Department of CSE organized an expert talk/Online Webinar on the "Profile Building" for 3rd year students on 21.10.2020 by BIJU's Career Labs, Bengaluru. Coordinated by Dr.Usha B A, Associate Professor, Dept of CSE .
- Dept. of CSE organized an expert talk on the topic "Importance of Cyber Security" by the Mr. Kaushik SA, CEO, InShoot (Alumni of ECE 2015 batch) for the 5th Sem Students on 21.11.2020.
- Dept. of CSE organized an expert talk on the topic "Collegevs Corporate and Expectations vs Reality" by the AishwaryaPuranik, Co-founded a company, CoachEdand.for the 5th Sem Students on 28.11.2020.
- Mr. Vimal Kumar Sancheti student of 8thSem Bearing USN 1BY17CS187, during the second wave peak time has been created the Google form technique for Requirement of plasma and to get Plasma donors after getting approval from govt hospital and he has started circulating form and got many donors information & shared to blood bank in Rajasthan. The work was published by the news agencies in Rajasthan.
- Mr. Vimal Kumar Sancheti student of 8thSem Bearing USN 1BY17CS187 delivered the session for "Covid vaccination awareness" was done by 1BY17CS187 Vimal Kumar Sancheti (8th-C) <https://youtu.be/t16nILN89sw> , during May 2021.
- Mr. Shantanujain , Student of 6thsem Bearing USN 1BY18CS147, prepared a list of resources for students who wants to learn web development for placement, Ti is available at the following address <https://www.notion.so/Resources-86c473865d7d4db28c9fe1e9cd415b5f>, during May 2021.
- Dept. of CSE, as a part of ISTE students chapter have organized a webinar on "Project Life Cycle: Skills and Tools " by an industry expert Mr. Dinesh Mahendrakar, Project Engineer Bangalore International Airport Limited, Devanahalli, Bengaluru on 16.07.2021 from 3:30 pm to 4:30 PM organised by Dr. Manoj HM, Asst. Professor.

Research Proposals Submitted:

- Dr. Usha B A, Associate Professor, CSE submitted the Research Proposal to "VGST" on 24.02.2021 for the FDP on Hands on Approach on Artificial Intelligence in Cyber Security.
- Dr. Arunakumari B. N, Prof. Vidya R. Pai, Assistant Professor, Dept. CSE submitted a Research Proposal to VGST GoK, on 24.02.2021 for the FDP scheme on "Universal Human Values in Technical Education".
- Dr. Arunakumari B. N, Dr. Lakshmi B. N., Assistant Professor, Dept. CSE submitted a Research Proposal to VGST GoK, on 24.02.2021 for the RGS/F scheme on "Conglomerate Prediction Model for Diabetes Mellitus".

FACULTY PUBLICATION

International Journal:

- Usha B A, Chandini M S, Sangeetha K N presented the paper on "An Overview On Strategies Deployed For Data Concealing in Audio" in Journal of Seybold Report, Vol 15, Issue 08, ISSN 1533-9211, pp 1104-1110, August 2020.
- Usha B A, Sangeetha K N, Seema Singh, Pratik Lokesh, Yashaswini S, Raksha R, Harshithaa M presented the paper on "Cognitive based Image Steganography for Fingerprint Biometric Data in Smart Cards using Machine Learning Algorithms" in Journal of Seybold Report, Vol 15, Issue 08, ISSN 1533-9211, pp 504-524, August 2020.
- Usha B A, Thrivikram M presented the paper on "Devops and Microservices: An Overview" in Journal of Seybold Report, Vol 15, Issue 08, ISSN 1533-9211, pp 319-328, August 2020.
- Dr. Arun Kumar B. R. "A Framework for Performance Evaluation of Machine Learning Techniques to Predict the Decision to Choose Palliative Care in Advanced Stages of Alzheimer's Disease." *Indian Journal of Computer Science and Engineering (Scopus indexed)* 12, no. 1 (2021): 35-46.

- Dr. Arunkumar B.R, "The Block-chain-Based Decentralized Approaches for Cloud Computing to offer enhanced Quality of Service in terms of Privacy Preservation and Security: A review." published in WoS indexed journal , Vol.21, No.4, April 2021.
 - Dr. Arunakumari B. N, "Indian Sign Language Recognition using 2-D Convolution Neural network and graphical user interface" has been accepted for publication in Turkish Journal of Computer and Mathematics Education (TURCOMAT) April 2021, indexing in Scopus.
 - Dr. Arunakumamari, "Prediction model for college selection and admission system" accepted for IJST journal, indexing in Web of Science ,May 2021
 - Dr. Arunkumar B.R. "Security Threat Identification and Prevention among Secondary Users in Cognitive Radio Networks", International journal of Computer Science and Network Security, Vol. 21 No. 5 pp. 168-174, web of Science indexed, May 2021.
 - Dr. Satish Kumar T at el., "An efficient Ranking model for Multiuser Social Media applications using customized Page Rank Method", Turkish Online Journal of Qualitative Inquiry (TOJQI), 12, no. 3, July 2021: 2314-2326, Science Research Society publication. (Scopus)
- International Conference:**
- Dr. Arunakumari B. N, "IoT Enabled Smart Traffic System for Public and Emergency Mobility in Smart City", has been accepted for IEEE 4th International conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) Conference Date: 7-9, October 2020 (Scopus).
 - Prof. Muneshwara M S "Blockchain enabled secure healthcare Systems" in "IEEE International Conference on Machine Learning & Applied Network Technologies".(IEEE-ICMLANT2020), is being jointly organized by the IEEE Hyderabad Section, India, and IEEE El Salvador Section, Central America in association with CMR Institute of Technology and Don Bosco University El Salvador.(Scopus Indexed) 20.12.2020 and 21.12.2020.
 - Dr. Usha B A, Associate Professor, CSE presented and Published the Paper in IEEE sponsored 3rd International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV 2021) at Francis Xavier Engineering College, Tirunelveli, India during 04.02.2021 to 06.022021(Scopus Indexed).
 - Dr. Arunakumari B. N., Assistant Professor, Dept. of CSE, "Novel Approach for Steganography to Camouflage Digital Information using Least Significant Bit" has been accepted for 3rd International Conference on Computational Intelligence in Pattern Recognition (CIPR) held during 24.02.2021 – 25.02 2021, publication in Springer Advances in Intelligent Systems and Computing (AISC) Series, indexed by: DBLP.
 - Dr. Usha B A, Associate Professor, Dept of CSE has presented and published the paper on "AUTOMATED SIGN LANGUAGE INTERPRETER USING DATA GLOVES" at IEEE sponsored International Conference on Artificial Intelligence and Smart Systems organized by JCT College of Engineering and Technology, Coimbatore, India during 25.03.2021 to 27.03. 2021.
 - Prof. Srivani P, " A comparative study on the effectiveness of growth rates in DWC and NFT Hydroponic system using Ensemble Classifier Model" , presented my research work in Fifth International Conference on Information and Communication Technology for Intelligent Systems, Springer Conference, 23.04.2021.
 - Prof. Muneshwara M S, Prof. Anand R, "Advanced Wireless Techniques to Avoid Accidents on Roads through Wearing Smart Helmet", "IEEE 5th International Conference on Intelligent Computing and Control Systems (ICICCS - 2021)" Vaigai College of

Engineering Madurai, India" 06.05.2021 to 08.05.2021, ISBN:978-1 - 6 6 5 4 - 4 8 3 4 - 5 , D O I : 10.1109/ICICCS51141.2021.9432193

- Prof. Muneshwara M S, Prof. Anand R, "Soft Computing Technique for Block Chain Enabled Secure Healthcare System", IEEE 5th International Conference on Intelligent Computing and Control Systems (ICICCS - 2021)" Vaigai College of Engineering Madurai, India" 06.05.2021 to 08.05.2021, ISBN:978-1-6654-4834-5,DOI: 10.1109/ICICCS51141.2021.9432133

National Conference:

- Prof. Muneshwara M S, Dr. Anil G.N, " Intrusion Prediction and Detection using Support Vector Machine (SVM) and Artificial Neural Network (ANN)", Virtual Conference on Artificial intelligence, Network security, Data science and IoT (National Level), VCANDO – 2020 organised by Department of CSE in association with CSI, Velammal Engineering College, Surapet. Chennai-600066 on 07.08.2020

Patent Filed:

- Dr. Hema Malini B. H. Associate Professor, Dept of CSE and Team published a patent on 25.06.2021 with the title "Smart Ticketing System for Smart Cities", bearing application number, 202141026348-A.

Book Chapter:

- Dr. Arunakumari B. N., Assistant Professor, Dept. CSE, chapter title entitled "An Efficient Maximum Flow Algorithm for Synergistic E-Governance of Business" in part of the Lecture Notes in Electrical Engineering book series. During Feb 2021.
- Dr. Arunakumari B. N., Assistant Professor, Dept. CSE, chapter title "A Novel Approach for AES Encryption-Decryption Using AngularJS" in Lecture Notes on Data Engineering and Communications Technologies, Vol. 58, S. Smys et al: COMPUTER

NETWORKS AND INVENTIVE COMMUNICATION TECHNOLOGIES, 978-981-15-9646-9, 495123_1_En (94).

- Kumar, K N Anjan, T. Satish Kumar, R. Krishna Prasad, and SG Ravi Kumar. "Web Object Ranking for Location-Based Web Object Search." *Advances in Smart Communication and Imaging Systems: Select Proceedings of MedCom 2020*: 151. May 2021.
- Mr. Anand R, Mr. Muneshwara M.S, Dr. Anil G N "Emergency Medical Services Using Drone Operations in Natural Disaster and Pandemics" organised by Gnanamani College of Technology, Namakkal, Tamil Nadu, India, SPRINGER PROCEEDINGS of the 5th International Conference on Inventive Communication and Computational Technologies (ICICCT 2021), 25-26, June 2021, Papers will be published in Springer Lecture Notes in Networks and Systems. ISSN: 2367-3370, Indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago. All books published in the series are submitted for consideration in the Web of Science.
- Mr. Muneshwara M.S , Mr. Anand R "IOT- based Smart Street light Control Application for Smart cities" organised by Gnanamani College of Technology, Namakkal, Tamil Nadu, India SPRINGER PROCEEDINGS of the 5th International Conference on Inventive Communication and Computational Technologies (ICICCT 2021), 25-26, June 2021, Papers will be published in SpringerLecture Notes in Networks and Systems. ISSN: 2367-3370, Indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago. All books published in the series are submitted for consideration in the Web of Science.
- Mrs. A Durga Bhavani , Mrs. Ashwini N "A Study on the Current Trends and Evolution of IoT", Chapter 1 in the book Current Approaches in Science and Technology Research Vol. 8 published by B.P International. Print ISBN: 978-93-91312-32-9, eBook ISBN: 978-93-91312-46-6 , D O I : 10.9734/bpi/castr/v8/2663F.

- Mrs. Ashwini N “Driver Drowsiness Detection and Alert System Using Computer Vision”, Chapter 1 in the book New Approaches in Engineering Research Vol. 1 published by B.P International. Print ISBN: 978-93-91215-62-0, eBook ISBN: 978-93-91215-70-5 , D O I : 10.9734/bpi/naer/v1/2206F.
- Dr. Arunkumar B.R wrote a Book chapter titled “Impact of Cyberattacks on Electronic Patient Health/Medical Records” published in Computer Networks and Inventive Communication Technologies Series , publisher Springer Nature , indexed in Scopus, Copyright Year June 2021.
- Dr. Sunanda Dixit, Book Chapter on Text Recognition Using Convolutional Neural Network for Visually Impaired People, Scopus Indexed. June 2021.
- R. Bharathi, T. Satish Kumar, G. Mahesh, and R. Bhagya, “Development of Diameter Call Simulations Using IPSL Tool for IMS-LTE”, Mobile Computing and Sustainable Informatics, vol 68, pp. 647-662, Lecture Notes on Data Engineering and Communications Technologies, Springer, ISBN: 978-981-16-1866-6 (eBook), <https://doi.org/10.1007/978-981-16-1866-6>, Indexed by SCOPUS. July 2021.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

MoUs / AWARDS / RECOGNITIONS

- 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.
 - ADHYA RAO bearing USN 1BY16EC005 has secured University level 4th rank with CGPA of 9.31.
 - HARSHITA V M bearing USN 1BY16EC033 has secured University level 8th rank with CGPA of 9.25.
 - ECE students namely Krishan Bajpai (Team Leader), Anisha lakshmi G R, Anjali U Patil and Aayushi Singhvi who were a part of interdisciplinary team from ECE and CSE has proudly made it to the IICDC Conclave Top 60 Winners on 31.05.2021 through 1:1 Virtual Evaluations of 'DST & Texas Instruments (TI) Inc. India Innovation Challenge Design Contest 2019', anchored by the N S Raghavan Centre for Entrepreneurial Learning (NSRCEL) an Indian Institute of Management (IIM), Bangalore, start-up incubation centre.
 - Dr. Surekha Gondkar, Associate Professor, ECE Department awarded with Ph.D degree during VTU 20th annual convocation held on 3rd April 2021.
 - Dr. Rashmi N, Assistant Professor, ECE Department awarded with Ph.D degree during VTU 20th annual convocation held on 3rd April 2021.
 - Dr. Robin Singla, Assistant Professor, ECE Department awarded with Ph.D degree during IIT - Bombay virtual convocation held during February 2021.
- 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.
 - Prof. Saneesh Cleatus T, Associate Professor, Dept. of ECE, has extended his support as a resource person for "Second Signal Processing Research and Innovation Conclave" on 14.06.2021 at IEEE Bangladesh Section at IEEE SPS branch, BUET.
 - Dr. Amit Kumar, Assistant Professor, Dept. of ECE, has extended his support as a resource person for a national level FDP on "Antenna Design and Printing for Practical Applications" on 27.06.2021 at BNM Institute of Technology, Bengaluru.
 - Prof. Ravindra V Asundi, Assistant Professor, Dept. of ECE, has extended his support as a resource person on "Evolution of online Teaching platforms during COVID-19 pandemic: opportunities and challenges" on 28.06.2021 at Bengaluru.
 - Dr. Deepa N. Reddy, Assistant Professor, Electronics and Communication Engineering has extended her support as Resource person for Phase I of AICTE Funded online Short Term Training Program on "Energy Efficient Techniques for 5G Wireless Communications", on 22 nd August 2020, organised by Pune Institute of Computer Technology, Pune.
 - Dr. Deepa N. Reddy, Assistant Professor, Electronics and Communication Engineering has extended her support as Resource person for Phase II of AICTE Sponsored One Week National level Short Term Training Program on "Energy Efficient

Techniques for 5G Wireless Communications” on 9th October 2020 , organised by Pune Institute of Computer Technology, Pune.

- Dr. Mala C S, Professor, Department of ECE has extended her support as resource person” on 27.09.2020 for webinar titled “The Harmony of Science and Religion” organized by The Bahai Community, Bengaluru.
- Dr. Mala C S, Professor, Department of ECE has extended her support as resource person” on 21.02.2021 for webinar titled “Hope- a Depleted Resource” organized by The Bahai Community, Bengaluru.
- Dr. Mala C S, Professor, Department of ECE has extended her support as resource person for “National level webinar series on innovative technologies” on 18.06.2021 organized by Sir. MVIT, Bengaluru.

Reviewer for Journal / Conference

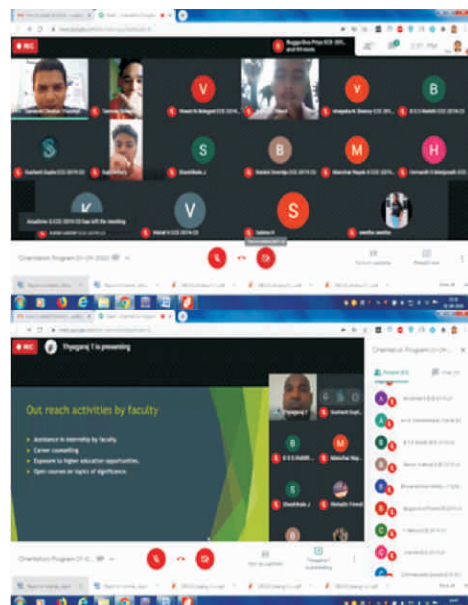
- Robin Singla, Assistant Professor, ECE Department was a reviewer for Carbon, two times in the month of July 2020.
- Dr. Vijayalakshmi G V, Associate Professor, Department of Electronics and Communication Engineering was a reviewer for IEEE access and IEEE Third International Conference on “Multimedia 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”.
- Dr. Mala C S, Professor and Dean, was a reviewer for “IEEE Third International conference on “Multimedia processing, Communications and Information Technology-MPCIT 2020”.
- Dr. Ambika R, Professor, Department of ECE was a reviewer for Journal for Engineering Science and Technology.
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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”.

Memorable Moments / 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.



- 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. The parents were happy about the effective conduction of the online classes and appreciated the efforts of BMSITM and reported about the occasional connectivity issues.



- Department of ECE conducted one week virtual 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.

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.
- Dr. Ambika R, Professor, Dept. of ECE conducted poster presentation for the

course Network and Cyber Security for eighth semester A section students on 05.06.2021 and 19.06.2021.

International Journal Publication

- Dr. Anilkumar D, Dr. Ambika R, "Drone Integrated Weather Sensors for Agriculture Purpose", International Journal of Electrical Engineering and Technology, ISSN: 0976- 6553, Volume- 11, Issue-5, July 2020, pp: 83-90 (Scopus).
- Raghunandan G H, Dr. A.Shobha Rani, "Design and Implementation of Efficient Routing Algorithm for Wireless Sensor Networks", International Journal of Advanced Science and Technology, ISSN: 2005-4238, Vol. 29, No. 3, July 2020.
- Ravindra V Asundi "Alive Human Detection and Navigation of Unmanned ground Vehicle in Natural disasters and Air crash" International Journal of Electrical and Electronics Engineering, ISSN:2278-9944, July 2020.
- 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. Hariprasad S A, "A Deep Learning Approach using3DConvolution 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. (Scopus)

- 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. (Scopus)
- 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)
- Shilpa Hiremath, A. Shobha Rani, "Identification of noise in an Image using Artificial Neural Network", *International Journal of Engineering Research & Technology* 10, no. 2, (2021): 345-348.
- Saneesh Cleatus T and Thungamani M "Classification of EEG Signals using Nonlinear Features and preprocessing Techniques", International Journal of Engineering and Advanced Technology 10, no. 5 (2021): 297-301.
- Rashmi N, et.al, "Radarmaneuvering target classification using Deep

learning" , GIS SCIENCE JOURNAL 8,no.7 (2021): 1869-9391.

- Rashmi N, et.al, "Comparative Analysis on Fall Detection of Elderly People", Design Engineering (2021): 1143-1147.

International Conference Publication:

- Rashmi N, Hamsavahini R, et.al, "Efforts to overcome the existing impairments in implementing Helicopter Satellite Communication System (HSCS)" presented in third International conference on emerging trends in science & technologies for engineering systems , I C E T S E - 2 0 2 0 , SJCIT,19.7.2020.
- Rashmi N, Gaurav Sethia, et,al, "Automated computer vision based weed removal bot", 6th International conference on electronics computing and communication technologies, IIIT, Bangalore, July 2020.
- 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.

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



- 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.

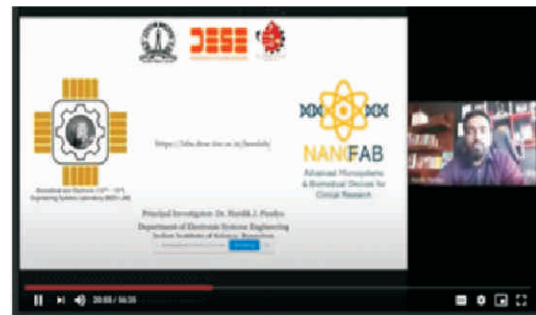
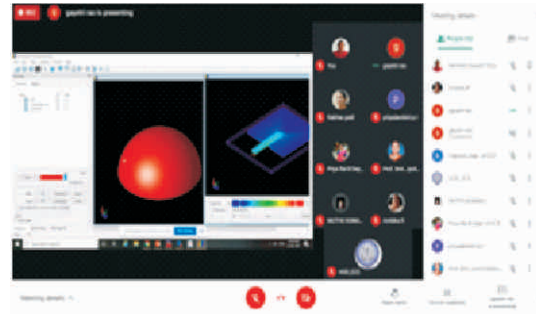


- Department of ECE organized an expert talk on the topic "Solid Waste Management "for 3rd, 5th and 7th semester students on 12.11.2020.



FDP conducted/ organised:

- Department of ECE, BMSIT&M organized a 5 days FDP on "Antenna Design: Tools and Techniques" from 07.04.2021 to 12.04.2021.
- About 22 participants from various colleges have undergone the FDP.



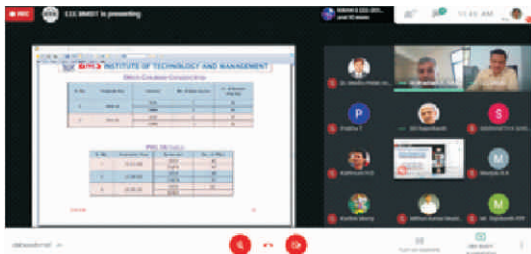
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VTU Rank:

Mr. Abhijit Kumar (USN:1BY16EE002) of Electrical & Electronics Engineering Department has secured 5th Rank in VTU examinations (2016-2020).

DAB Meeting:

The E&EE Program online DAB meeting was held on 26.09.2020, at 10.45 am through Google meet platform. Dr. N. Ramarao chaired the session. Dr Prashant A. Athavale welcomed all the members, introduced the purpose of the DAB, and discussed the agenda points for the meeting. Dr N. Ramarao, HOD, Dept. of EEE presented overview of the departmental activities for the academic year 2019-2020 to the DAB members. Dr. Madhu Palati, Program coordinator, presented PAC proceedings of the department and action plan developed for the upcoming academic year 2020-2021. The DAB members gave suggestions based on the departmental activities and PAC proceedings report presented.



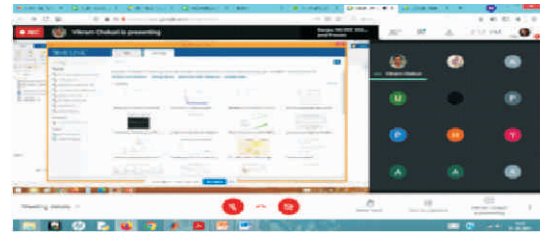
Faculty as Resource Person:

- Dr. Madhu Palati, Assistant Professor, Department of Electrical and Electronics Engineering has extended their support as Resource person for 6 day AICTE sponsored STTP PHASE-III on "Research Trends in Renewable Photovoltaic system and its Research challenges" on 18.12.2020 at SV college of Engineering, Tirupati.

Open Course:

Department of Electrical and Electronics offered two open courses "Application of Multilevel Inverters" and "MATLAB Applications in Electrical Engineering" from 01.06.2021 to 05.06.2021. a) Application of Multilevel Inverters was

coordinated by Dr. Sanjay Lakshminarayanan. b) A total of 47 participants attended MATLAB Applications in Electrical Engineering coordinated by Dr. Prashanth A.A, Vikram Chekuri and Rajnikanth.

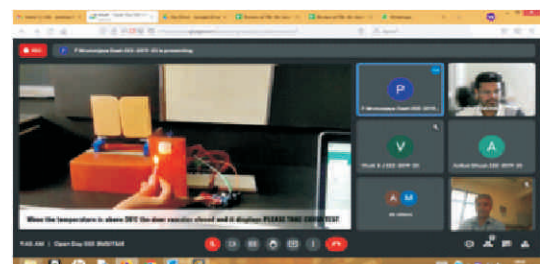


Open Day:

The projects carried out under Project Based Learning were exhibited on 04.12.2020 during openday. A set of 15 best project were shortlisted from the exhibits, presented by 3rd and 5th sem students. These select projects were further scrutinised by external judges on 7th December, 2020. Mr. Arvind Nanjundaiah from DOVER corporation was invited as an external judge. Dr Prashanth N A from the EEE Department, BMIT&M was the internal judge. Two teams from each of the section of 3rd and 5th semester were adjudged top projects and cash prizes were awarded.

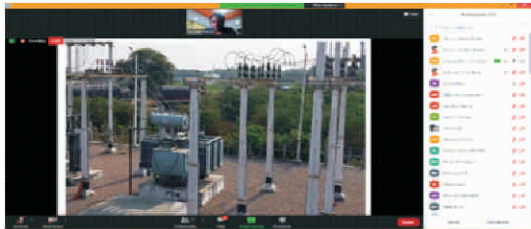
Open Day:

A Review of the project carried out by the 4th and 6th Sem EEE students under PBL were held on 30.07.2020. The 4th Sem had 18 batches presenting their work and 6th Sem had 17 batches. 12 batches were shortlisted for the Second and Final Round of Open Day PBL Exhibition Cum Competition. These projects were evaluated further on 31.07.2021 Mr Sarath Vadakkepat from VMware, San Francisco, California was the invited judge for the event.

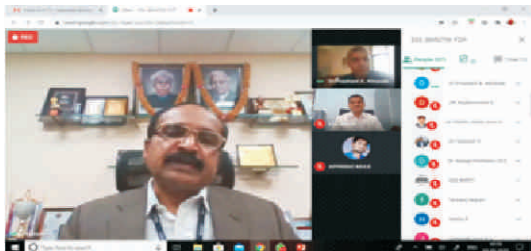


Industrial Visit:

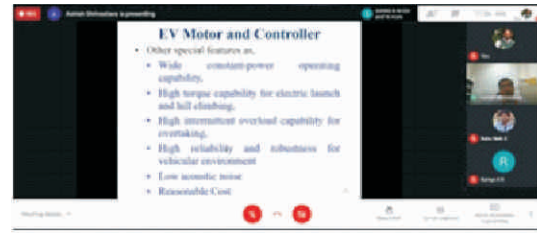
Department of Electrical and Electronics Engineering arranged a Virtual industrial visit jointly with M/S Skill Dzire for 4th and 6th semester students to a 33/11 KV substation on 15.07.2021. About 80 students participated in this virtual Industrial visit. The virtual walk through was guided by Sourav Mitra, Industrial expert & Educator, SkillDzire where he described about the substation main components, supportive components, auxiliary components and earthing.

**FDP conducted/organised:**

- The Department of Electrical and Electronics Engineering organised a Five Day, Online Faculty Development Program on "Advances in Power Electronic Applications" from 04.08.2020 to 08.08.2020 at BMS Institute of Technology and Management. There were 144 participants, who were given an e-certificate.



- The Department of Electrical and Electronics Engineering organised a Five Day, Online Faculty Development Program on "Power Electronic Applications in Electric Vehicles and Smart Grid" from 12.04.2021 to 19.04.2021 at BMS Institute of Technology and Management. There were 58 participants, who were given an e-certificate.

**Technical Fest: TechTransform_Vidyut 6.0**

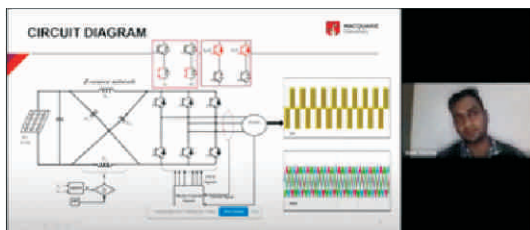
The department of Electrical and Electronics Engineering organized four events 1) Poster Presentation 2) Circuits Investigation Debugging 3) Rewind My Mind and 4) Out of the Box as part of Techtransform 2020 and Vidyut 6.0 on 18.12.2020 and 19.12.2020.

Expert talk organized:

- Department of Electrical and Electronics Engineering organized online webinar on the topic "Rain Water Harvesting" in collaboration with MGIRED, Bengaluru for EEE students on 11.12.2020.
- Department of Electrical and Electronics Engineering organized an alumni talk on the topic "Investments & Savings" for 5th Semester students on 19.09.2020 by Mr. Aranya, Sr. Software Associate, M/s Cognizant Pvt. Ltd to make the students aware about investments and saving.
- Department of Electrical and Electronics Engineering organized an expert talk on the topic "Profile Building" for fifth semester students on 23.10.2020. An online workshop was conducted by Careerlabs, an exclusive partner with BYJUs, for fifth semester students on 23rd October 2020. The topic for the workshop was "Profile Building". The talk was delivered by Mr. Hemant Kumar M, Senior Manager, Marketing and L&D.
- Electrical and Electronics engineering department organized an Alumni talk on the topic "Preparation for placements and higher education" for Vth Semester students on 24.10.2020.
- Electrical and Electronics Engineering department organized an expert talk on the topic "Professional Ethics in Engineering Practice" for 3rd semester

students on 21.11.2020. In the talk Mr. Naresh, Assistant Engineer at TRANSCO, mentioned about the various non ethical practices followed by the electricity consumers.

- Department of Electrical and Electronics Engineering organized an online expert talk for fifth semester students on 28.11. 2020. The title of the talk was "IBM and EDA Systems", about 39 students attended the session. The talk was delivered by Chaitanya Peddawad who is a BTech and MTech graduate from IIT, Madras and who is now working with IBM in the EDA team.
- A Technical talk was conducted by Electrical and Electronics Engineering department on 24.06.2021 for the 6th Semester students. Dr Vivek Sharma, Electrical Engineer, National Measurement Institute, Sydney, Australia, delivered a talk on "Efficient Fault-tolerant schemes for electric vehicles".



- Department of Electrical and Electronics Engineering organized an expert talk on the topic "Design and Automation", for 4th, 6th and 8th semester students on 09.07.2021. Chaitanya Peddawad of IBM, EDA systems delivered a talk on the subject of Design and Automation and other details related to design of chips and VLSI. About 40 students attended the talk online. Arranged by Dr. Sanjay Lakshminarayanan and Shilpa G.
- An invited talk was arranged for the 6th Sem EEE students on the topic "Electrical Power System" covering the topics related to generation, transmission and Distribution of the power on 26.07.2021. It was delivered by Mr. Basavaraj K from KPTCL. More than 50 students attended the event online and interacted with the speaker.

- Department of Electrical and Electronics Engineering organized an expert talk on the topic "Career building through Higher studies and research", for 6th semester students on 14.07.2021. Mr. Raghavendra Mudgal, Computer Vision Engineer and Doctoral Student, Norwegian University Hamberg delivered a talk on the subject of "Career building through Higher studies and research"

WORKSHOP:

A workshop on "Intellectual Property Rights and IP Management for Startups" was conducted on 25.06.2021, for 4th and 6th sem students. Total 88 participants attended the workshop. Mr. Narendra Bhatta H L, Founder, Intellocopia, Bangalore was the resource Person for the workshop.



International Journal:

- Madhu Palati, "Experimental Analysis of Zigbee Approach for Controlling the Induction Motor", Journal of Electrical and Power System Engineering, Volume 6, Issue-2, 2020 August 24: 2582-5712.
- Vikram Chekuri, Narapareddy Ramarao, Prashanth N.A "Voltage Collapse Estimation Using Singular Value Decomposition in an Integrated Power System", Solid State Technology, ISSN 0038-111X , vol.63, Issue.6, 19162-19169, Dec-2020.
- Mrs. Suma Umesh published a research article titled " Carbonaceous ZnO nanocomposite for sensing of H₂S gas at sub-ppm concentration" in Taylor and Francis journal of fullerenes, nanotubes and carbon nanostructures on 15.03.2021.
- Madhu Palati, Prashanth N A, "Simulation studies on Polymeric

Insulators under various contamination conditions", Journal of Chengdu University of Technology, 26, no.7,(2021):1-8

International Conference:

- Suma Umesh, "Ni-Substituted ZnO carbonaceous composite prepared by inert-ambient pyrolysis for high-selective SO₂ sensing", 1st INTERNATIONAL CONFERENCE ON ACCELERATING INNOVATIONS IN MATERIAL SCIENCE AIMS 2020, August 2020.
- Madhu Palati, "Simulation studies on Nano-hybrid polymer composites as covered conductor for enhancing the insulation characteristics of low voltage and medium voltage applications", 1st INTERNATIONAL CONFERENCE ON ACCELERATING INNOVATIONS IN MATERIAL SCIENCE AIMS 2020, August 2020.
- Prashanth N.A., "Flux Maximization in Wind Turbine Permanent Magnet Synchronous Generator made of NdFeB permanent magnets", 1st INTERNATIONAL CONFERENCE ON ACCELERATING INNOVATIONS IN MATERIAL SCIENCE AIMS 2020, August 2020.
- Prashant A. Athavale presented a paper titled "A Fusion Method for Automated Segmentation of the Lungs from the Chest X-Rays" at the 4th International Conference on Intelligent Computing and Communication (ICICC - 2020) organized by Dayanand Sagar University, Bengaluru, held online on 19th September, 2020.
- Vikram Chekuri, N. Ramarao, Prashanth N A presented a paper titled "An Augmented Bus Model of Static Synchronous Compensator in an Integrated Power System" at the First International conference on Electrical, Electronics and Communication Technology organized by Sri Shakti Institute of Engineering and Technology, Coimbatore, held online on 15th September, 2020.

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Faculty as Resource Person:

- Prof. Banuprakash R, Assistant Professor, Department of ETE has extended his support as Resource person for a training program on “ Microwave Transmission lines and Passive devices” to the students of V sem ECE, FET, Jain University from 05.11.2020 and 07.11.2020.
- Prof. Raghunandan G H, Assistant Professor, Department Of ETE has given expert talk on “Advanced Learning Techniques in ADE”, Organized by Department of ISE, HKBKCE, Bangalore in association with ISTE.
- Prof. Saritha I G ,Prof. Sowmyashree M S, Prof Sumathi M S, Department Of ETE has given expert talk on “Basics of Microsoft Office”, Organized by Balakara Bala mandira, Chitradurga on 27th December 2020.
- Prof. Sowmyashree M S, Asst prof, Department of Electronics and Telecommunication Engineering has done External Auditing in the Department of Electronics and Communication at Rao Bahadur Y Mahabaleswarappa Engineering College, Bellary on 29.01.2021.
- Prof. Saritha I G & Prof Sowmyashree M S, Assistant professors ,ETE delivered a talk on the topics “Networking Model implementation using Packet tracer ” and “ Networking Model implementation using Wireshark ”, respectively in National level Webinar Series on Innovative Technologies organised by Department of Electronics and Communication Engineering, Sir MVIT on 19th June 2021.
- Prof. Thejaswini S, Assistant Professor, Dept. of ETE has extended her support as a resource person on “Neural Networks & Applications “on 28th January 2021 during the one-month internship on “Artificial Intelligence and Machine Learning” organized by IETE Bengaluru from 21st January to 27th February 2021.

Reviewer for Journal / Conference:

- Dr. Seema Singh, Professor, Department of ETE was a reviewer for 4th International Conference on Electrical Engineering (ELEC 2020), which will be held in November, 2020 in UAE, Dubai.
- Prof. Banuprakash R, Assistant Professor, Department of ETE, was a reviewer for Third International Conference on Advances in Electronics, Computers and Communication (ICAIECC-2020), which will be held 11-12 December 2020 at Reva University, Bengaluru.
- Prof. Siddiq Iqbal, Assistant Professor, Department of ETE, was a reviewer for Third International Conference on Advances in Electronics, Computers and Communication (ICAIECC-2020), which will be held 11-12 December 2020 at Reva University, Bengaluru.
- Prof. Banuprakash R, Assistant Professor, Department of ETE, was a reviewer for Second International Conference on Communication and Intelligent systems(ICRTCIS-2020), which was held 20.11.2020 and 21.11.2020 at Arya Engineering college and IT, Jaipur, India.
- Prof. Thejaswini S, Assistant Professor, Department of ETE, was a reviewer for the 1st International Conference on Engineering and Technology (ICoEngTech) 2021 virtually held on: 15th - 16th March 2021, Malaysia.

Faculty Awards:

- Prof. Mallikarjuna Gowda C P, Aishwarya V, Jayashree N and Aishwarya Rao, received an certificate of honour, Best Paper award Gold category “ Performance of PSO for Spectrum Allocation in CRN”, International Conference on Multidisciplinary Technologies & Challenges in industry-4.0 (ICMTCI-4.0) on Digital Platform, organized by East Point College of Engineering and

Technology, Bengaluru, held on 18th - 19th September 2020.

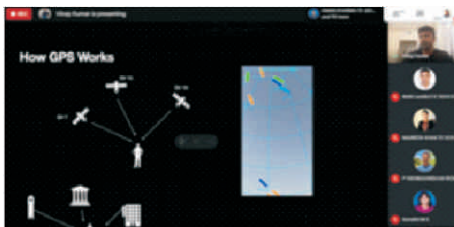
- Prof. Sumathi M S & Prof. Banuprakash R, Assistant Professors, ETE, completed their PhD defence on 16.2.2021 at RVCE and 21.04.2021 at BMSIT&M respectively

Alumni talk organized:

- The Department of Electronics and Telecommunication Engineering organized Alumni talk on 19.09.2020 from 9:30 A.M. to 11:30 A.M on the topic "Enlightenment on Placements and Higher studies".



- Department of ETE organized an Alumni talk by Mr. Vinay Kumar, Senior Wireless System Design Engineer, Apple Inc., USA on "GPS Technology in Smart phones" for 3rd, 5th and 7th ETE students on 16.10.2020.



Expert talk organized:

- Department of ETE organized an Expert talk on 26.09.2020 from 8:45 A.M. to 11:00 A.M on the topic "Android Walk Through".



- Department of ETE organized an expert talk by Mr. Brijesh Somashekar, Associate General Manager, Schneider Electric on "DevOps for Future Engineers" for 3rd, 5th and 7th ETE students on 23.10.2020.



- Department organized an expert talk on the topic "Life Skills" a motivational speech as a part of Universal Human Values of Induction program -offline for first semester students on 22.02.2021, speaker - Mr. Aurobindo, Mechanical Engineer, Presidency University



Patent Details :

- Prof. Banuprakash R and Prof. Siddiq Iqbal, Assistant Professors, Dept. of ETE, have published patent titled "COVID 19 Thermal Screening using Smart Helmet" in Indian Patent Office Journal no 37/2020, with patent application number 202041036651, on 11.09.2020.
- Prof. Banuprakash R, Assistant Professor, Dept. of ETE, and Dr. Hariprasad S A, Director, FET, Jain University, have published patent titled "A Novel Compact Printed Antenna loaded with Hexagonal Complementary Spit Ring Resonators(HCSRR) for penta band wireless applications" in Indian Patent Office Journal no 45/2020, with patent application number 202041047659, on 06.11.2020.

- Prof. Siddiq Iqbal and Prof. Banuprakash R, Assistant Professors, Dept. of ETE, have published patent titled "Catastrophe detection and smart rescue system utilizing android smart phone with real-time location tracking" in Indian Patent Office Journal no 47/2020, with patent application number 202041049454 , on 20.11.2020.
- Prof. Raghunandan G H, Prathibha N has filed a Design application patent. The Design Accepted and Published, Journal No is 25/2021 and Journal Date is 18.06.2021

Research Proposals:

- Dr. Raju Hajare, Associate Prof & HoD of ETE submitted a research proposal to "SERB, Delhi" on 09.06.2021, and the title of the project is "Design and Fabrications of a Novel Functionalized Graphene based Supercapacitor for Electrical Battery less Vehicles and Space Applications".

FACULTY PUBLICATION

International Journal:

- Prof Saritha I G ,Prof Sowmyashree M S , "Comparative analysis of Client Server based Protocol implementation using packet tracer" Seybold Report ISSN: 1533 - 9211 Volume 15 - Issue 8 - 2020(Scopus)
- Prof. Sowmyashree M S, Prof. Mala C S , "Bandwidth allocations schemes in WSN using priority based MAC protocol " Seybold Report ISSN: 1533 - 9211 Volume 15 - Issue 8 - 2020(Scopus)
- Dr. Seema Singh Sangeetha K N, et al, "Cognitive based Image Steganography for Fingerprint Biometric Data in Smart Cards using Machine Learning Algorithms", Journal of Seybold Report, Volume 15, Issue 8, August 2020, pp 507-524
- Dr. Raju Hajare, Anil.T, Santhosh, "Design and Implementation of Solar Energy Conservation System for Societal Applications", Journal of Electronic Design Technology, ISSN: 2229-6980, Volume-11, Issue-2, Sept-2020 (Index copernicus, Google scholar, Peer reviewed, non paid)
- Prof. Thejaswini S, , Mr. Manjunath U, Mr. Nishit Rathi, Mr. Prasanna Kumar, Mr. Prasunn , "Alcohol and Crash Detection for Helmets", Journal of Seybold Report , Volume 15 - Issue 9 – 2020, PP356-359 , ISSN NO: 1533-9211 .(Scopus)
- Prof. Banuprakash R, Siddiq Iqbal, "Digital Twins – A Paradigm approach in Industrial Automation" CSI Communications- Monthly Magazine, Volume No. 44, ISSUE NO. 6, September 2020.
- Dr. Seema Singh et al, "Development of Sensors Based Compost Machine Using Electronic Control Unit And IOT", Seybold report, Volume 15 (9), September, 2020, pp 923-929.
- Prof. Mallikarjuna Gowda C P, Raju Hajare, " Space-time trellis codes: Field programmable gate array approach" , International Journal of Reconfigurable and Embedded Systems (IJRES) Vol. 9, No. 3, November 2020, pp. 213~223 ISSN : 2089-4864 , DOI : 10.11591/ijres.v9.i3.
- Prof. Saritha I G, Rajeshwari M H , Priority Aware Frequency Domain Polling Protocol in Cyber Physical Systems to Ejection of Malicious Node Attack , International Journal of Intelligent Engineering and Systems (Scopus) Vol.14, No.3, April 2021 .
- Banuprakash. R, Siddiq Iqbal, Chandrika Murthy, Manushree N, AP Subhiksha, Wadhwa Simran Deepak, "A Microstrip antenna for Bluetooth, WLAN and X band communication applications using Defective Ground Structure", Turkish Journal of Computer and Mathematics Education, Vol.12 No.12 (2021), pp 2656-2662. - Scopus
- Raju Hajare, Vishnuvardhana.R, Srikanth.R, "MEMS Based Sensors – A Comprehensive review of Commonly Used Fabrication Techniques", Elsevier journal of Materials Today- Proceedings , <https://doi.org/10.1016/j.matpr.2021.05.223>, PP 1-11, May-2021-Scopus

- Thejaswini S, Dr. K M Ravikumar. "Electroencephalogram Based Emotion Detection Using Hybrid LongShort Term Memory" European Journal of Molecular & Clinical Medicine, Volume 7, 8, 2020, PP- 2786-2792, ISSN 2515-8260
- Prof. Sowmyashree M S, Prof. Saritha I G, Archana Arun, Manasa M, Samhitha C Spoorthi H Shetty, "Trace file analysis to obtain congestion window , through put and PDR European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 08, 2020
- Prof. Saritha I G , Dr. Rajeshwari M H "An eradication of malicious node attack using a Priority aware frequency domain polling in cyber physical systems " in EJCMC Vol8 issue 2 (Peer Reviewed)

International Conference:

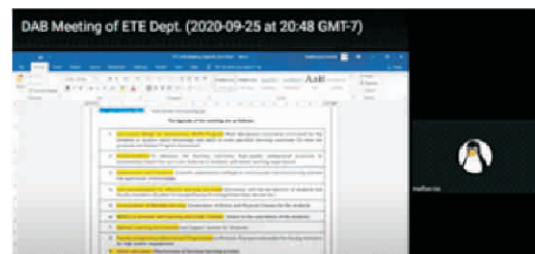
- Prof. Banuprakash R, Hariprasad S A, Neha R, Sudha M, " A Miniaturized Reconfigurable Antenna for Wireless Applications using PIN Diodes and Slots", International Multidisciplinary Conference on Current Research Trends-2020, (IMCCRT-2020-1279), 19-20 September 2020.(Scopus).
- Prof. Mallikarjuna Gowda C P, Aishwarya V, Jayashree N and Aishwarya Rao, " Performance of PSO for Spectrum Allocation in CRN", International Conference on Multidisciplinary Technologies & Challenges in industry-4.0 (ICMTCI-4.0) on Digital Platform, organized by East Point College of Engineering and Technology, Bengaluru, held on 18th - 19th September 2020.
- Prof. Siddiq Iqbal, Sujatha B R, " Secure Key Management Scheme for Hierarchical Network Using Combinatorial Design" , International Conference on Innovations in Electronics, Communication, Computing & Automation, Koneru Lakshmaiah Education Foundation (Deemed to be University), 23rd November 2020.
- Dr. Seema Singh, Natya S, "Land Use

Land Cover Classification Using Deep Learning Classifiers For Remote Sensed Images", International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS 2020), St. Joseph's College of Engineering and Technology, Kerala, India, 10-11, December 2020, ELSEVIER-SSRN Digital Library

- Dr. Sumathi M S, C. Soujanya. Joshi, R. Rithika. Thomas and Rittu. G, "Analysis and Performance of Machine Learning Algorithms on Disease Diagnosis," 3rd International Conference on Energy, Power and Environment: Towards Clean Energy Technologies, 2021, pp. 1 - 6 , d o i : 10.1109/ICEPE50861.2021.9404447 ,April-2021.
- Prof. Sowmya shree M S, Saritha I G, Abhilash S, Aman Sharma, Sailakshmi Saravanan, Siri N Rao, "MACHINE LEARNING BASED REWARD BIN FOR EFFECTIVE WASTE SEGREGATION "International Conference on Recent Innovations in Science & Technology EKC Technical Campus Ernad Knowledge City Cherukulam, Malappuram, Kerala on 20.6.2021.

Department Advisory Board (DAB):

- Department Advisory Board (DAB) meeting of Electronics & Telecommunication Engineering department was held on 26.9.2020 from 9AM to 11AM, via digital platform.



Book Chapter:

- Raghunandan G H Authored Textbook on Analog Circuits, Published in June 2021 by Infinite Learning Solutions, ISBN:978-81-948862-0-4.

Magazine/National Paper:

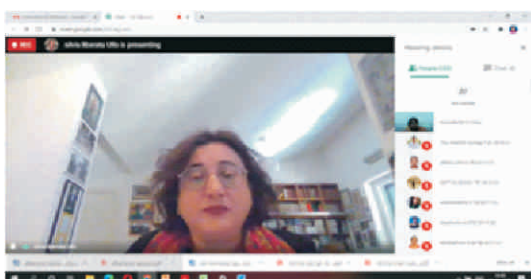
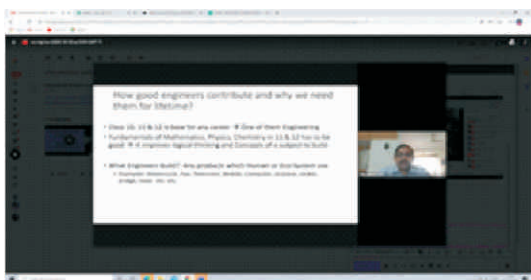
- Dr. Raju Hajare, Associate Professor of ETE, published an article "Seeing India's future in Telecommunication" in national news paper "Indian Express" on 22.12.2020.

Consultancy:

- Dr. Banuprakash R, Dept. of ETE, has completed a consultancy work of "Testing RF filters using VNA" worth of Rs1200/- on 20.11.2020 for Saphthagiri college of engineering and also on "Testing of Microstrip filter using VNA" of worth Rs. 1700/- for the client PDIT, Bellary.
- Dr. Banuprakash R conducted Workshop on "Microwave transmission lines and devices" at Jain University funded of Rs 3000/-

Webinar Series :

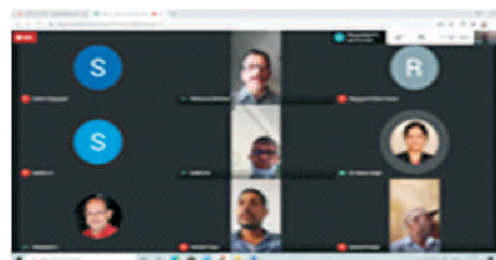
- Department of ETE organized International Webinar on "Global Career Prospects in Electronics and Telecommunication Engineering" where the forum was open to the students of ETE and general public (students and parents awaiting to join an Engineering course) on 3.10.2020 .The speakers Dr. Debabrata Das, Professor, IIIT, and Dr Silvia Liberata Ullo, Department of Telecommunication, Universita degli Studi del Sannio di Benevento- Piazza, Guerrazzi, Italy.



- A Webinar on "Over View of IETE Student Membership" was organized on 30.11.2020 under IETE Student Forum. The talk was delivered by Mr. Ramesh G Chairman of Membership Committee of IETE Governing Council

PTM :

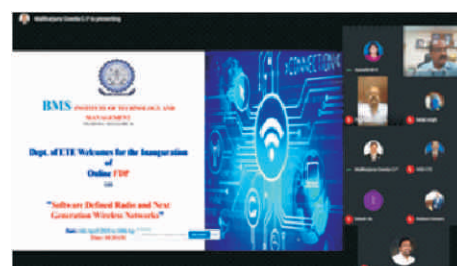
- Parent Teacher Meet (PTM) was held on 17.10.2020 via digital platform. The PTM was scheduled from 11am to 11:30am, 11:30am to 12pm and 12pm to 12:30 pm for third, fifth and seventh semester students' parents respectively.



- Parent Teachers Association (PTA) for first semester students parents conducted on 13.02.2021 from 9AM to 11AM offline and from 11AM to 11:40AM online.

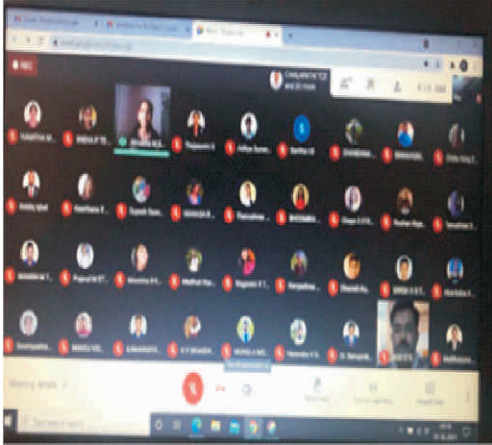
**FDP Conducted :**

- Department of ETE, has conducted Five days National Level Faculty Development Program on "Software Defined Radio and Next Generation Wireless Networks" an emerging area in the field of Telecommunication during 06.04.2021 to 10.04.2021



Open course:

- Department of ETE conducted open course on “Advanced Networking and IOT Applications” and “MATLAB Programming on Engineering Applications” from 1.6.2021 to 5.6.2021 for all the branches of BMSIT&M.

**Texas Innovation Center, A Texas University Program Activity**

- The one-month online Internship on “Advance Embedded system design and IoT Applications” under Texas Innovation Center, BMSIT&M(MoU) in collaboration with M/s Edgate Technologies Pvt. Limited was organized for ETE/ECE/EEE final year students from 28th September 2020 to 28th October 2020. Around 40 students participated.
- The Series 2 of Four weeks online Internship on “Advance Embedded system design and IoT Applications” for final year and pre-final year students, from 14th December 2020 to 9th January 2021. Around 4 students participated.

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

FACULTY ACHIEVEMENTS:

Session Chair:

- Prof. Swetha M S, Assistant Professor, was a Jury member for Online Project Presentation 2021, VI semester students of MCA department at Cambridge Institute of Technology, Bangalore – 560036, on 29.05.2021.
- Dr. Narasimha Murthy M S, Assistant Professor, ISE was session chair for International Conference In Communication, Electrical and Biomedical Systems (ICCCEBS 2021) at K P R Institute of Engineering & Technology, Coimbatore on 25.03.2021 and 26.03.2021
- Dr. Rudresh Shairwaikar, Assistant Professor, ISE was a Session Chair for 7th IEEE, 2021 International Conference on Advanced Computing & Communication Systems (ICACCS) at Coimbatore, Tamilnadu, India on 19-20.03.2021.

Patent:

- Dr. Veena N and Prof. S. Mahalakshmi, were granted an Australian patent on the title "Security Technique in Energy Harvesting IoT Devices using Slotted Aloha with Noma" - Application Number: 2021100913, Publication dated 14.04.2021.
- Dr. Shridhar Sanshi was granted an Australian Govt. patent on the title "Woman Safety Hidden Malicious Chip using IoT-based Location Tracking Technology", Application Number: 2021101341, Publication dated 28.04.2021.
- Prof. Swetha M S, Assistant professor, Dept of ISE, Mr. Rakshith D, Mr. Praveen N M, Mr. K. BhuvanSai, Mr. Mayur G N, (Students) Published Patent with Title "Indian Crop and Fertilizer Recommendation System using AI and Machine Learning Techniques", Indian patent office with Application Number- 202141032290- on 18/07/2021.

- Dr. Narasimha Murthy M S et.al of ISE has filed and published an Indian Patent with the title, "Method for Plant Disease Detection using Machine Learning and Methods There of", Indian Patent Office with Application No: 202141010619, April 2021.

BOE Members:

- Dr. Manjunath T N, Professor is a BOE member for CSE/ISE board, VTU for the academic year 2020-21
- Dr. Manjunath T N, Professor, is a BOE Member for UG & PG Programs of Information Science and Engineering, Ramaiah Institute of Technology for the academic year 2020-22.

Faculty as Resource Person:

- Mrs. Swetha M S, Assistant Professor, ISE, has delivered a talk on "Cryptographic Techniques in Information Security" on 27.08. 2020 at EWCE, Bengaluru.
- Webinar on "Cryptographic Techniques for Blockchain and Security", on 07.09.2020 organized by Department of MCA Cambridge Institute of Technology Bangalore - 560036.
- Delivering talk on "Cryptography and Soft Computing Techniques for Blockchain Applications" at Department of CSE, Cambridge Institute of Technology, Bangalore, on 7.05.2021.
- Dr. SheelaKathavate, Associate Professor, ISE Department has extended her support as Resource person for the webinar "Importance of Software Engineering" on 04.08.2020 at Sir MVIT.
- Dr. Manjunath T N, Professor & Dean-ER, ISE Dept delivered a talk on Trends in Data Analytics in One Week online Short term training program (STTP), AICTE Sponsored organized by SDM College of Engineering, Dharwad, Karnataka on 17.12.2020.
- Dr. Narasimha Murthy M S, Assistant Professor, ISE has extended his support

as Resource person for Half yearly Research Advisory Meeting on 16.03.2021 at GITAM University, Bengaluru.

- Dr. Rudresh Shirwaikar delivered a Invited talk on AI and ML in Robotics on 17.03.2021 at Goa State Innovation council for graduate students.
- Dr. Geeta Amol Patil, Associate Professor, ISE has extended their support as Resource person for delivering a talk on Systems for Data Analytics, at CISCO, Bangalore, on 08.05.2021.
- Dr. Geeta Amol Patil & Dr. Rudresh Shirwaikar Resource person for four days FDP on "Future Trends of Data Analytics" , from 15.06. 2021 to 18.06.2021 at Lourdes Matha, College of Science & Technology, Thiruvananthapuram, Kerala
- Dr. Shridhar Sanshi, Assistant Professor, ISE has extended their support as Resource person for three days faculty development program on "IoT and its framework-Hands-on" from 24.06.2021 to 26.06.2021 at Narayana Engineering College, Gudur, Andhra Pradesh.
- Dr. Narasimha Murthy M S, Assistant Professor & Dr. Geeta Amol Patil, Assoc. Professor Department of ISE, has extended their support as External Jury member for INNOCENTRIC – 2021 Virtual Inter-Collegiate Project Competition held on 23.07.2021 at Global Academy of Technology, Bengaluru.
- Dr. Sheela Kathavate, Associate Professor, Dept. of ISE has extended her support as a resource person for the webinar on "PROCESS SCHEDULING CHALLENGES IN MULTI-CORE SYSTEMS" on 16.07.2021 at Sir M. Visvesvaraya Institute of Technology, Bangalore.
- Dr. Geeta Amol Patil, Assoc. Professor, ISE has extended her support for M. Tech Dissertation Review & Evaluation on "Towards Improving User Experience by Adopting VR as Visualization Tool on Virtual Forest Application" , PES University on 09.07. 2021

Reviewer for Journal / Conference:

- Mrs. Shanthi D L, Assistant Professor, Department of ISE was a reviewer for IJECE
- Prof. Swetha M S, Assistant Professor, Department of ISE was a reviewer for the International conference "Second Symposium on Machine Learning and Metaheuristics Algorithms, and Applications (SoMMA'20)".
- Dr. Rudresh Shirwaikar, Assistant Professor, Department of ISE was a reviewer for journal Computer Methods and Programs in Biomedicine, Elsevier (Scopus Q1), February 2021.
- Prof. Swetha M S, Assistant Professor, Department of ISE has Got the "EXCELLENCE IN REVIEWING AWARD" from Journal of Engineering Research and Reports in February 2021 and the journal is quality controlled, OPEN peer-reviewed, open access international journal.
- Prof. Shanthi D L, Assistant Professor, Department of ISE was a reviewer for International Journal of Electrical and Computer Engineering, Scopus Q2, February 2021
- Dr. Rudresh Shirwaikar reviewed a funding proposal for the UKRI Medical Research Council – Clinical Research Training Fellowship. (MICA: Utilizing Artificial intelligence to develop and test the Premature Infant Outcome Risk (PRIOR) tool for neonatal clinical trial stratification).
- Prof. S. Mahalakshmi reviewed a paper "Touchless Recycle Bin Internet of Things to Preventing Germs Spread and Real-time Integrated Waste Management," for Walailak Journal of Science and Technology.
- Dr. Geeta Amol Patil, Associate Professor, ISE was a reviewer for the conference Sixteenth International Conference on Information Processing (ICInPro) – 2021
- Prof Shanthi D L, Assistant Professor, Department of ISE was a TPC member

and reviewer for the International Conference RTIP2R-2021.

- Dr. Rudresh Shirwaikar, Assistant Professor, Dept. of ISE was a reviewer for Computer Methods and Programs in Biomedicine, Elsevier Journal.

Expert talk organized:

- The Department of ISE organized an expert talk on the topic " IOT Applications using Raspberry Pi " for 5th semester students on 22.10.2020 .The resource Person for the session is Mr. Krishna V, Design Engineer, Infidata Technologies.
- The Department of ISE organized an expert talk on the topic " Patent Search " for 7th semester students on 20.10.2020 frpm 11.00 to 12.30 pm .The resource Person for the session is Prof. Praveen Kumar T.N from Mechanical department , BMSIT&M.
- Department of ISE organized an expert talk on the topic "Software Testing" by Mrs. MeghaBorkar, Test Lead, ATOS Syntel, for 3rd Semester students on 19.11.2020.
- Department of ISE organized an expert talk on the topic " Software Testing" by Mrs. MeghaBorkar, Test Lead, ATOS Syntel, for 3rd Semester students on 19.11.2020.
- Ms. Divyatha Prabhu, an alumna of BMSIT&M, Founder of the startup "Motivational talk on Career Guidance", an innovative online placement training forum.
- Department organized an expert talk on the topic " Edge Analytics for Aerial Unmanned Vehicles" for 6th semester students on 24.07.2021. The speaker Dr. Sreejith Vidyharan, Post Doctoral Research Fellow, University of North Dakota, USA.

Alumni Talk

- Organized a technical talk on "Importance of Cyber Security" by Alumni Mr. Kaushik S A, CEO, InShoot was held on 20.11.2020.
- A webinar on "College vs Corporate: Expectation vs Reality", by Alumni Ms.

Aishwarya Puranik was held on 28.11.2020.

- Organised a technical talk on "Expectation vs Reality" by alumni Mr. Shankar A was held on 9.05.2021

Technical Fest:

Department of ISE has conducted TECHTRANSFORM-2020 from 18.12.2020 to 19.12.2020.

FDP conducted/ organised:

Department of ISE has conducted a national level FDP / SDP on "Trends in Data Analytics" from 10-8-2020 to 14-8-2020. There were about 41 participants.

Department of ISE has conducted a FDP on "Mobile Application Development using Android OS" from 06-04-2021 to 10-04-2021.

Funded Projects:

Dr. Rudresh D Shirwaikar and student team was granted KSCST funds for project titled "Intelligent Waste bot using IOT and Deep learning for Smart CITY".

International Journal:

- Mrs. Swetha M S, has Published a paper "A Novel Approach for Weather Monitoring System Using IoT" in IJIRST –International Journal for Innovative Research in Science & Technology| Volume 7 | Issue 3 | August 2020 ISSN (online): 2349-6010
- Dr. Rudresh D Shirwaikar et. al. have published a paper "Estimation of Aminophylline effectiveness at Neonatal Intensive Care Unit (NICU) using Artificial Intelligence" in *Malaysian Journal of Medicine and Health Sciences* (eISSN 2636-9346) Mal J Med Health Sci 16 (SUPP8): 47-54, Aug 2020. (Scopus)
- Prof. Shanthi D L, has published a paper "Intelligent Hybrid Genetic Clustering Data Analytics Method Implementing Efficient News Feed Services in Online Mobile Applications", in *European Journal of Molecular & Clinical Medicine* Vol 7, Issue 2, pp. 3219-3225.(Scopus).

- Prof. Swetha M S, Dr. Pushpa S K, have published "Blockchain enabled secure healthcare Systems" in "IEEE International Conference on Machine Learning & Applied Network Technologies" (IEEE-ICMLANT2020), Electronic ISBN:978-1-7281-8885-0 Print on Demand(PoD) ISBN:978-1-7281-8886-7. Indexed on 23rd February 2021, DOI: 10.1109/ICMLANT50963.2020.9355970 (Scopus indexed).
 - Prof. Swetha M S published a paper titled "Intrusion Prediction and Detection using Support Vector Machine (SVM) and Artificial Neural Network (ANN)" in European Journal of Molecular & Clinical Medicine, ISSN 2515-8260 Volume 7, Issue 08, 2020(Scopus indexed)
 - Prof. Swetha M S, has published a Paper Titled "ExypnoSteganos - A smarter approach to steganography" in "Journal of Intelligent and Fuzzy Systems", Vol-41,pp 1-12,2021, DOI: 10.3233/JIFS-189879 (Scopus Indexed Journal) also indexed in IOS Press Content library.
 - Prof. Swetha M S, Dr. Pushpa S K, Dr. Manjunath T N, have Published a Paper titled "Strong Secure Anonymous Location Based Routing (S2ALBR) method for MANET" in "Turkish Journal of Computer and Mathematics Education" Vol-12, Issue No-3(2021), 4349-4356. Open Access Scopus Journal.(Scopus Indexed Journal).
 - Prof. Gireesh Babu C N et al. Published a Paper titled "A Semantic Health Observation System Development Based on The IoT Sensors" in Turkish Journal of Physiotherapy and Rehabilitation", Volume: 32, Issue: 3(2021), pp-1721 - 1729. Peer-reviewed scientific journal (ESCI, Scopus Indexed Journal)
 - Prof. S. Mahalakshmi et.al, have published a paper titled "Analyzing the Performance of Marketing Life Cycle Process using Software Architecture Model", in International Journal of Aquatic Science, Vol 12, Issue 02,(2021), 1763-1769,ISSN 2008-8019
- National conference:**
- Prof. Shanthi D L presented a paper titled "Analyzing Peoples' Behaviour through Media Data", in virtual conference on Artificial intelligence, Network Security, Data Science and IoT, (VCANDO-2020) organized by department of Computer Science and Engineering on 6.8.2020 to 7.8.2020.
 - Dr. Rudresh D. Shirwaikaret. al., presented a paper titled "Risk Stratification of Neonates using Machine Learning Techniques". 2020, IEEE International Conference on Distributed VLSI, Electrical Circuits, & robotics (Discover 2020), Oct 30-31,2020 (Scopus indexed / Web of Science).
 - Prof. Swetha M S, presented a paper "ExypnoSteganos - A Smarter Approach to Steganography" in Sixth International Symposium on Intelligent Systems Technologies and Applications (ISTA'20), Oct 15-16, 2020 (Scopus indexed / Web of Science).
 - Prof. Swetha M S, Dr. Pushpa S K, Dr. Manjunath TN, have presented a Paper "Blockchain enabled secure healthcare Systems" in IEEE International Conference on Machine Learning& Applied Network Technologies (IEEE-ICMLANT2020), December 20-21st, 2020, Hyderabad.(Scopus Indexed).
 - Prof. S. Mahalakshmi, Dr. Veena.N, Guruprasad. S, Pallavi. H, presented a paper " Conditional Monitoring of a Sprinkler System Using Feedback Mechanism", Proceedings of 4th International Conference on Intelligent Sustainable Systems(ICISS 2021)Springer , 26th and 27th Feb 2021, PP 475-482.
 - Prof. Swetha M S, presented a Paper titled "Soft Computing Technique for BlockChain Enabled Secure Healthcare System", in Fifth International Conference on Intelligent Computing

and Control Systems (ICICCS 2021) at Vaigai College of Engineering, Madurai, India.

- Prof. Swetha M S Presented a Paper Title "Advanced Wireless techniques to avoid accidents on roads through wearing Smart helmet", in 5th International Conference on Intelligent Computing and Control Systems (ICICCS 2021) at Vaigai College of Engineering, Madurai, India.

Book Chapter:

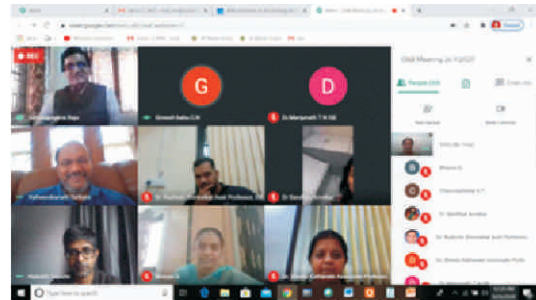
- Dr. Veena N, S. Mahalakshmi, Mr. Guruprasad S published a book chapter titled "Consumer BCI Devices- Application and challenges" in Advanced aspects of Engineering Research, Vol-II, BP International Publisher, pp 81-91.
- Mr. Guruprasad S, Dr.Veena N, S. Mahalakshmi, published a book chapter titled "Application of EEG Signals- A Case Study" in Advanced aspects of Engineering Research, Vol-II, BP International Publisher, pp 98-105.
- Prof. Shanthi D L published a book chapter titled "Sustainable Agriculture Types and Policies" in Cutting-edge perspective in Agricultural and Allied Sciences (Vol-1), Under Scholars' Press, PP. 519-548.

Coding Club:

- A Codeathon Event was conducted by CodingCrib, Department of ISE on 30th August 2020 at 2.00-6.00PM in collaboration with Preppytes. 99 participants were actively involved in the event from various colleges.
- An online webinar session "Introduction to Data Science" was conducted under the Coding Club from Department of ISE on 18th September 2020 from 6.00pm to 7.00pm. Around 26 Students from ISE department of various semesters is participated in the webinar.
- Coding Club, Department of ISE conducted a poster presentation on "Popular Programming Language" on 5th March 2021.

DAB meeting

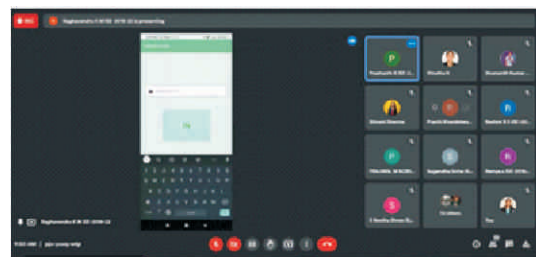
Department of ISE has been conducting Department Advisory Board meetings to get the inputs from subject experts, industry experts and stakeholders every semester. In continuation with this, online meeting was held on 26.9.2020 at 10.00 am.



Open Course

The department of ISE conducted five Open Courses from 1-06-2021 to 5-06-2021. Open courses are conducted for students to upgrade themselves to new technologies as per the industry's requirements. In this connection following courses were offered by the department.

1. Robotics with Artificial Intelligence
2. Programming for IT career
3. Data Science using Python
4. Internet of things with Hands on
5. Android Application Development



Project Based Learning

Department of ISE, organized a PBL Project Review on 30.07.2021 and 31.07.2021. To exhibit the project work carried out by the students of the IV and VI semester. The External evaluation was conducted with the Industry persons for 6th sem Mr. Ankit Agarwal , Android developer, APP Nest. 2. and for 4th sem Mr. Anupchandra, Site Reliability Engineer for the Data Flow, Linkedl .

DEPARTMENT OF MECHANICAL ENGINEERING

MoUs / Awards / Recognitions:

- Mr. Arun D (1BY16ME010) has secured I Rank in Mechanical Engineering for VTU, Belagavi during the 20th Convocation held in April 2021. Also secured 7 Gold Medals. He is the topper among 14803 Mechanical Engineering students graduated in the year 2020.
- Dr. G L Anantha Krishna, Assistant Professor, has successfully completed his Ph.D under the able guidance of Dr. K M Sathish Kumar, Professor and Head, Department of Mechanical Engineering. He has completed his Viva voce examination on 15th January 2021 and Convocation on 4th April 2021. The title of his research work is "Study, Characterization and Optimization of Various Parameters of Permanent Magnet Eddy Current Braking System".
- Mr. Keerthi Kumar N (4MT13PMN01) has completed his Ph.D under the guidance of Dr. T K Chandrashakar, Professor, RNS Institute of Technology, Bangalore. He has completed his Viva on 24th Nov 2020. Received PDC on 19th Dec 2020 and Convocation on 4th April 2021. Title of the Thesis "Studies on Combustion, Performance and Emission Characteristics of Four Stroke DI Compression Ignition Engine using Simarouba oil as Bio Fuel". Research center is Mangalore Institute of Technology and Engineering, Moodabidri.
- Dr. K. M. Sathish Kumar, Professor and Head, Department of Mechanical Engineering was nominated as the Nominee of VTU, Belagavi to the "Board of Studies for Department of Industrial and Production Engineering" of Malnad College of Engineering, Hassan from 17.06.2021 to 17.06.2024.
- A team of 4th year students from BMSIT took part in the E-yantra ideas competition. The team consisted of: Kaushik Balasundar – Team Leader (ME), Aby J Kottoor (ME), Akash S. Nambiar (ME), Shwetha D (CSE) Under the guidance of Mrs. S. Nithya poornima, Assistant Professor. The project they presented was titled – "Hydraulically Actuated Autonomous Nurse (HYAAN)". The full-scale prototype was completed by January 2020.
- A team of 4th year students from BMSIT took part in the E-yantra Theme competition. The team consisted of: Kaushik Balasundar – Team Leader (ME), Aby J Kottoor (ME), Akash S Nambiar (ME), Shwetha D (CSE) Under the guidance of Mrs S.Nithya poornima, Assistant Professor The team first took part in an aptitude round which they cleared to secure a spot in the competition, which was held in two stages. The theme assigned to the team was called "Patrol Fish", where the aim was to design a biomimetic fish for underwater pollutant inspection in the Ganges river.
- A funded project titled "Infrastructure development for synthesis and fabrication of leadfree piezoelectric materials and its devices" was sanctioned to Dr. Nandini R, Assistant professor from mechanical engineering department for an amount of Rs 15,00,000/- by VGST, Bangalore under the scheme KFIST-L1 on 25 September 2020.
- Mr. T N Praveen Kumar, Associate Professor, Dept. of Mech Engg, BMSIT&M guided a "Design and development of reusable inflatable air Bag safety helmet for two wheelers and it's communication system for crash location" an undergraduate project was funded by KSCST and was selected as one of best projects in the state level evaluation/exhibition 2019-20 conducted through online on 01/08/2020".
- Dr. Sangamesh. B. Assistant professor, Department of Mechanical engineering was recognised for the valuable contribution towards promoting National Education Policy 2020 and creating awareness in building nation's

knowledge and understanding about NEP that has been issued by Vidya Bharati, A non-profit NGO working in the education sector.

- Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has completed final Ph.D viva on 24th November 2020 under the guidance of Dr. T. K. Chandrashekar, Associate Professor, RNSIT, Bangalore. Title of the thesis: Studies on Combustion, Performance and Emission Characteristics of Four Stroke DI Compression Ignition Engine Using Simarouba Oil as Bio Fuel.
- Dr. Nandini R., Assistant Professor in department of Mechanical Engineering received best paper incentives of Rs 10,000/- on 28 Nov 2020.
- Under the guidance of Professor Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering, students of V semester (A Sai Sumanth, Ajay Sunil, Alap Mundayoor, Ankit Namniar and Ashitesh Nadella) won first prize in PBL-open day competition for the project titled "Design & Fabrication of an ROV for under water exploration" held at BMS Institute of Technology and Management on 7th Dec 2020.
- Professor Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has received certificate of achievement for the year 2020-2021 for the "Professional development, Skill development and Career Guidance for students" from Career Labs, Bangalore on 30 th Nov 2020.
- Prof. G L Anantha Krishna, Assistant Professor, Department of Mechanical Engineering has successfully completed his PhD viva voce examination on 15/01/2021 under the able guidance of Dr. K M Sathish Kumar, Professor and Head, Department of Mechanical Engineering. The title of his research work is "Study, Characterization and Optimization of Various Parameters of Permanent Magnet Eddy Current Braking System".
- Three teams from Aeroclub BMSIT&M

participated in Trivia Jet 2.0, a National level Aviation Quiz competition conducted by IIT-Bombay on 14th July 2021. The students are Adityan A (1BY19EC008) and Akin Anto (1BY19EC008) secured second position in the preliminary round, Nidhi (1BY20AI032) and Mridul Sadashiv (1BY20IS090) secured the third position in the preliminary round, Jayant (1BY18ME022) and Siddharth (1BY18ME056) secured the fourth position, which saw over 100 teams participating in it. All three teams cleared the preliminary round with flying colours and moved into the final round on Zoom platform where they bagged the I, III and V position in All India level.

Reviewer for Journal / Conference:

- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has reviewed Elsevier Materials Today Proceedings paper titled "Energetic and environmental evaluation of two molecular diagnostic systems for COVID-19" on 19th April 2021.
- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has reviewed Elsevier Materials Today Proceedings paper titled "Heat and Mass Transfer on MHD Convective Unsteady Flow of a Jeffrey Fluid past an Inclined vertical Porous Plate with Thermal Diffusion Soret and Aligned Magnetic field" on 19 th April 2021
- Dr. K. M. Sathish Kumar, Professor and HoD, Department of Mechanical Engineering was a reviewer for International Journal of Automotive and Mechanical Engineering (IJAME).
- Dr. K. M. Sathish Kumar, Professor and HoD, Department of Mechanical Engineering was a reviewer for International Journal of Automotive and Mechanical Engineering (IJAME).
- Dr. K. M. Sathish Kumar, Professor and HoD, Department of Mechanical Engineering has reviewed technical

papers for International Conference for Frontiers in Engineering Science and Technology (ICFEST 2020).

- Dr. K. M. Sathish Kumar, Professor and HoD, Department of Mechanical Engineering was a reviewer for International Journal of Automotive and Mechanical Engineering (IJAME).
- Dr. K. M. Sathish Kumar, Professor and HoD, Department of Mechanical Engineering was a reviewer for International Journal of Automotive and Mechanical Engineering (IJAME).
- Dr. K. M. Sathish Kumar, Professor and HoD, Department of Mechanical Engineering has reviewed technical papers for International Conference for Frontiers in Engineering Science and Technology (ICFEST 2020).
- Prof. Kiran M D, Assistant Professor, Department of Mechanical Engineering has reviewed Three technical papers for Elsevier Materials Today Proceedings.

Faculty as Resource Person:

- Dr Sangamesh Assistant Professor, Department of Mechanical delivered a talk on Renewable Energy and Waste Management during AICTE ISTE refresher program on Thermal Engineering sponsored by AICTE organized by Kalpataru Institute of Technology, Tiptur. On 26.04.2021.
- Prof. Praveen Kumar T N, Associate Professor, Department of Mechanical Engineering delivered a talk on "Patents Aspects of Electrical Vehicles" in one week online FDP on "Sustainable Electric Mobility – Opportunities and Challenges" from 15th to 21st April 2021 organized by the Department of Mechanical Engineering, BMS Institute of Technology & Management on 19th April 2021.
- Prof Praveen Kumar T N, Associate Professor, Department of Mechanical Engineering. And Chief Co-ordinator, IP Cell. was invited as resource person for the open course Robotics with Artificial Intelligence for Information Science and Engineering Department from 1st to 5th, June 2021.

- Dr. Nandini R, Assistant professor, department of mechanical engineering, was invited as resource person for AICTE Training & Learning (ATAL) academy sponsored national level 05 days online FDP on "ROBOTICS" organized department of collegiate & Technical Education" Government Polytechnique, Harapanahalli. From 24 Aug 2020 to 28 Aug 2020.
- Prof. Praveen Kumar T N, Associate Professor, Dept. of Mech. Engg. and Chief Co-ordinator, Intellectual Property (IP) Cell was invited as a resource person for the One day seminar on "Introduction to Intellectual property rights: Patents" organised by Dept. of Mechanical Engineering and R&D Centre, Brindavan College of Engineering, Bengaluru on 27th July 2021.

Expert talk organized:

Department of Mechanical Engineering organized a Guest Lecture/Webinar has been organized for Mechanical Engineering Students entitled Mechatronics Products Design by J E Diwakar Professor (Rtd.) Centre for Product Design and Manufacturing (CPDM), Indian Institute of Science Bengaluru-560012 on 23-06-2021. This event co-ordinated by Prof T.N. Praveen Kumar.

Scientific Committee Member

Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has been selected as Scientific Committee Member for 2nd International Conference on Emerging Trends in Science, Engineering and Management (ICETSEM-2021), Organized by GM Institute of Technology (GMIT), Davangere, Karnataka, in Association with Institute for Engineering Research and Publication (IFERP), from 15th to 16th July 2021.

Book Chapter Authored

Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has been published paper titled "An Exhaustive Study on the Use of Jatropha Based

Biodiesel for Modern Diesel Engine Applications” in 1st edition, Volume 2, ISBN 9780367456207, e-book of “Biodiesel Fuels Based on Edible and Nonedible Feedstocks, Wastes, and Algae” of Taylor & Francis Group, by CNC Press on 4th May 2021.

Design Patent Publications

- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering published design patent on 18/06/201, titled “Cost Effective Ventilator Using CO₂ Laser Cutting Machine for COVID-19” in Indian Patent for Designing under class of 24-01-Appartus Equipment for Doctors, Hospitals and Laboratories. Journal number 25/2021 with design number 342442-001.
- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering published journal in Indian patent, titled “Intelligent Mechanical Robotic Weed Controller for Sugar Beet Production”. Application number: 202141026549, Date of filing: 15/06/2021, Date of Publication: 02/07/2021.

Outside world Interaction

Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has been assisted as external evaluator for Internship presentation by 8th sem students of Mechanical Department, Channabasaveshwara Institute of Technology, Gubbi on 18th June 2021.

Open course

- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering coordinated one week open course on “Data Analysis using Excel” organized by the department, from 1st June to 5th June 2021
- Dr. Avinash. G and Dr. Jagadeesh. YJ, Assistant Professor, Department of Mechanical Engineering coordinated one week open course on “Introduction to Computational Fluid dynamics”. Organized by the department, from 1st June to 5th June 2021.

FDP Conducted/ Organised:

- The Department of Mechanical Organized five days online faculty development program (FDP) under with Dr. K.M. Sathish Kumar as the convenor & HOD, on the topic “Advanced Nano Materials, Nano Fabrication Techniques & Devices” from 10th August 2020 to 14th August 2020. Around 368 participants had registered across the country. Dr. P.K. Panda, Head Material Science Division was the chief guest and he delivered the key note address on nano smart materials & its applications. All resource persons where from CeNSE department, IISC Bangalore. Dr. Nandini R and Dr. Santosh Kumar coordinated the above-mentioned FDP program successfully.
- The Department of Mechanical Engineering organized one week online FDP on “Sustainable Electric Mobility – Opportunities and Challenges” from 15th - 21st April 2021. The objective of the FDP was to give the insight into the Electric Vehicles from the mechanical engineering perspective. Resource persons from both Industry and Academia gave a lecture during the FDP. All the members of the Department Participated in the Programme.
- The Department of Mechanical Engineering organized Building CV session on 29 May 2021 for final year mechanical engineering students by Mr Pavan Kumar S., BMSIT Connect lead, Mr Pavan briefed about the details to be included in the CV and Linked in Profile. He explained about the Importance of optimization of CV based on the job role and also told that the importance of having good attitude for finding jobs along with technical knowledge. Also he covered the Career opportunities and advantages of going for Masters Department of Mechanical Engineering organized online Skill Development Program on “TOYOTA ENGINES” using Cisco WebEx platform for Teaching and non-Teaching faculties for Diploma and ITI colleges on 5th Nov 2020. There were two session organised. Around 159

members were present. This skill Developed gave an insight on the working of various components Of I.C. Engine.

Expert talk organized:

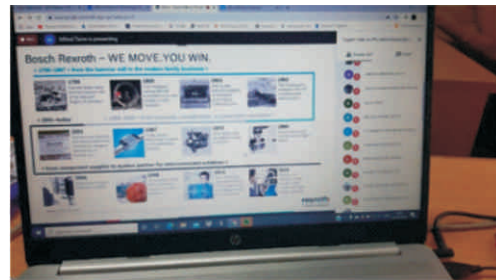
- Prof. Keerthi Kumar. N Assistant professor, Department of Mechanical engineering organized virtual talk from Mr. Nithin Ravi, Career Coach from Career Labs Bangalore, Powered by BYJU'S on "Carrier Guidance and Profile Building" for V semester ME students on 19/10/2020 from 11:15am to 12:50pm. 48 students from V Sem Mechanical Engineering Department have been attended the program.
- Department of Mechanical Engineering organized an online talk on 'Latest Innovations in Mechanical Engineering' by Mr. Lokesh Venkata swamy, Founder & CEO of Innomantra consultancy PVT Ltd, Bengaluru on 19th November 2020 for the 5 semester students. Around 30 students attended the talk online. The students got an insight into the various aspects of Innovations. The program was coordinated by Prof T. N. Praveen Kumar, Associate Professor, Dept. of ME, BMSIT&M.
- Department of Mechanical Engineering organized an online talk on 'Digital evaluation-IIoT Robotic Process Automation' by Mr P.K. Muthukumarswamy, Founder and CEO of Krutibimb, Vizistata Technologies Pvt LTD. Bengaluru on 12th November 2020. Around 40 students attended the talk online.. The program was coordinated by Prof T.N. Praveen Kumar, Associate Professor, Dept. of ME, BMSIT&M.

CLUB Activities:

- SAE India BMSIT Collegiate club organized an online club activity on 29th October 2020 with Prof. Rajesh P, Department of Mechanical Engineering, BMS College of Engineering, Bengaluru delivering a talk on "Awareness about SAE India". The program was coordinated by Mr. Shripad Diwakar,

Assistant professor, Department of Mechanical engineering on Google Meet platform. Dr.K M Sathish Kumar, HoD and Vice Principal, Dr.H K Govindaraju were present during the online activity.

- Department of Mechanical Engineering organized an online talk on 'PLC with Industrial Internet of Things (IOT)' by Mr Milind Tavre , Assistant Manager, Bosch Rexroth, Pvt India LTD Bengaluru on 25th September 2020 as part of the Robotics club activity. Around 40 students attended the talk online. The students were enriched with basic knowledge of PLC and its application to suits in today's scenario. The program was coordinated by S. Nithya Poornima, Asst. Professor, Dept. of ME, BMSIT&M.



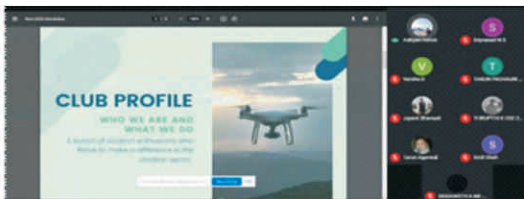
Photos of the online talk by Mr Milind Tavre

- Department of Mechanical Engineering organized an online talk on 'Multipurpose Unmanned Aerial vehicles ' by Mr. Vinayak Tsalla, Founder & CEO of Tsalla Aerospace, Bengaluru on 18th September 2020 as part of the Aero club activity. Around 27 students attended the talk online. The students got an insight into the various aspects of Flight dynamics and Design and modelling of unmanned aerial vehicles. The program was coordinated by Madhu M. C.
- The AEROCLUB organized a webinar on 21st May on the topic "How Covid19 is driving drone innovation" by Leo Peter Charles of Jane Aerospace, Bengaluru. The webinar was attended by 102 students. It was presided over by HOD, ME and coordinated by Prof. Madhu M. C. The students were exposed to the recent trends in drone industry and in particular, during the COVID time.



Webinar on "How Covid19 is driving drone innovation"

- An orientation program was conducted by the Aero Club of BMSIT&M, on 22nd of May 2021 for all the student members of the club on Google Meet. The session began with the core team members of the club introducing themselves and sharing their experiences on UAVs, aero-modelling and plane spotting. The core team then explained the objectives of the club and how they plan on achieving it.



Orientation program of the Aero Club

Journal Publication

- Prof. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has published paper titled "Study of Performance and Emission Characteristics of C.I Engine fuelled with Hybrid Biodiesel" in International Journal of Vehicle Structure and Systems on 22nd Jan 2021.
- Prof. S. Nithya Poornima Assistant Professor, Department of Mechanical Engineering has published paper titled "Studies on Nanomaterials as Additives for Lubrication- A Review" in International Journal of Engineering Science and Computing" ISSN 2321 3361 on February 2021.
- SHRIPAD DIWAKAR, Assistant Professor, Department of Mechanical Engineering, has published a paper entitled "Object locator and path finding robotic arm" in International

Journal of Advance Research, Ideas and Innovations in Technology (IJARIIT), Vol-7, Issue-2, (March – April 2021), pp 141-144 (A Thomson Reuter Indexed Journal).

- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering and his published paper titled "Parametric optimization of hot chamber pressure die casting process" in Science direct Materials today Proceedings, DOI : <https://doi.org/10.1016/j.matpr.2021.01.621>.
- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering and his published paper titled "Fracture toughness study of epoxy composites reinforced with carbon fibers with various thickness" in Science direct Materials today Proceedings, DOI : <https://doi.org/10.1016/j.matpr.2021.02.271>.
- Prof. Madhu M. C , Assistant Professor, Department of ME published a paper titled" Hybrid DC-AC Homes with rooftop solar power" in the Scopus indexed and WOS- EDP sciences Journal of E3S Web of Conferences, Vol 239,(2021)00025.
- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering published paper titled "Optimization of process parameters for turning machine using Taguchi super ranking method: A case study in Valve Industry" in Elsevier, Science direct, Materials today Proceedings, DOI : <https://doi.org/10.1016/j.matpr.2021.05.043>.
- Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering published paper titled "Vibration based condition monitoring of rotating part using spectrum analysis: A case study on milling machine" in Elsevier, Science direct, Materials today Proceedings, DOI: <https://doi.org/10.1016/j.matpr.2021.05.226>

- Mr. G.L. Anantha Krishna, Assistant professor, Department of Mechanical Engineering has published a paper titled "Analytical and Finite Element Analysis of a Typical Curved Beam Under loading" in International Journal of Engineering Science and Computing (IJESC), ISSN -2321 3361, Volume 10, Issue No.7, July 2020, Pg 26631 - 26633.
 - H. K. Govindaraju, Kiran M D, ARK Swamy, Deepak S and Bhaskar Raju S A "Mechanical Behavior of Heat Treated Al6061-Tungsten Carbide and Graphite Reinforced Hybrid Composites", Journal of Critical Reviews, ISSN- 2394-5125 VOL 7, ISSUE 17, 2020.
 - Kiran M D, Nithin Kumar, Ezhil Vannan.S, Vincent Linish Dsouza , Madeva NagaraI "Dry sliding wear behaviour of short Carbon fibre reinforced aluminium matrix composites", Journal of Critical Reviews, ISSN- 2394-5125 VOL 7, ISSUE 15, 2020.
 - Kiran M D, Nithin Kumar, S. S. Sharma, B. Ravikiran Kamath, R. K. Veerasha "Sliding Wear Behaviour of Nickel-Coated Short Fibre-Reinforced Al7075 Composites", Journal of Failure Analysis and Prevention-Springer, <https://doi.org/10.1007/s11668-020-00955-1>, 11 August 2020-scopus indexed.
 - Keerthi Kumar N, Raghunandhan G. H, Vinutha B, Prathiba N. "ADVANCED DECISION SUPPORT SYSTEM FOR PRECISION AGRICULTURE USING WSN", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 11 August 2020. scopus indexed.
 - Keerthi Kumar N., Raghunandhan G. H, Karunya Sankar, Rushank Prabhudesai. "i- TRASHER- SMART WASTE MANAGEMENT SYSTEM ", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 11 August 2020.- scopus indexed.
 - Keerthi Kumar N., Prathiba N., Raghunandhan G. H., Vinutha B., "Design and Implementation of Solar Based Smart Mobile Charging System", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 4th Sept 2020. (Indexed).
 - Keerthi Kumar N, Assistant professor, Department of Mechanical Engineering published paper titled "Impact of injection timing on simarouba seed oil -fueled CI engine" in Materials Today: Proceedings, Elsevier on 20th November 2020.
- International conference**
- Keerthi Kumar N., "Overview of Remotely Operated Vehicle" at International Conference on Advanced Computing and Communication Technology (ICACCT-2021), Organized by the Department of Information Technology, Francis Xavier Engineering College, Tirunelveli held on 6th and 7th May 2021.
 - Keerthi Kumar N, "Optimization of process parameters for turning machine using Taguchi super ranking method: A case study in Valve Industry" at International Conference on Materials and System Engineering (ICMSE-2021), Organized by the Department of Mechanical Engineering, SJB Institute of Technology, Bengaluru in Association with Technical Institute for Engineers, held on 7th and 8th May 2021.
 - Keerthi Kumar N., on "Optimization of vibration based condition monitoring of motor drive end using Taguchi technique: A case study on milling machine" at 4th International Conference on Inventive Material Science and Applications (ICIMA-2021), Organized by the PSG Institute of Technology, Coimbatore, held on 14th and 15th May 2021.
 - Kiran M D, H K Govindaraju, T Jayaraju, "Fracture toughness of surface treated short fiber reinforced epoxy composites" AIP Conference Proceedings 2247, 020006 (2020); <https://doi.org/10.1063/5.0003825>.
 - H K Govindaraju, Kiran M D, Lokesh

Yadhav B R "Wear behavior of aluminum metal matrix composites: A Taguchi approach" AIP Conference Proceedings 2247, 040005 (2020); <https://doi.org/10.1063/5.0003802>.

- Keerthi Kumar N, "Development of Brake Friction Material for Automotive Applications", at International Conference on Advanced Material Science and Applications (ICASMA-2020), Organized by department of Physics and IQAC of Ramaiah Institute of Technology, Bangalore, from 3rd Sept to 4th Sept 2020. (Indexed).
- Sundaresh S, "Influence of fly ash and nickel particles on fatigue behavior of Al-Si alloys (LM6) metal matrix composites" in the *International Conference on Accelerating Innovations in Material Science(AIMS 2020)* organized by Department of Chemistry, BMS Institute of Technology and Management, Bangalore from 4th Aug. to 6th Aug. 2020. scopus indexed.
- Nandini R, "Optimization of Mechanical Attributes of an Energy-Absorbing PU Foam in the international conference "Accelerating Innovations in Material Science (AIMS -2020), conducted by department of chemistry, BMSIT &M, Bangalore. scopus indexed.
- Keerthi Kumar N, "Effect of Injection Pressure and Nozzle Geometry on Engine Performance in Simarouba Methyl Ester Operated Diesel Engines", in 1st International Conference on Accelerating Innovations in Material Science AIMS 2020, Organized by department of Chemistry, BMSIT & M, Bangalore from 4th Aug to 6th Aug 2020. scopus indexed
- S. Nithya Poornima "Automated testing for quality Inspection of food Grains" in the AICTE sponsored Two Days International E-conference on Sustainable Development in Mechanical Engineering (SDME 2020) organized by the department of Mechanical Engineering VNRVJIET Hyderabad during October 30-31, 2020.
- Sundaresh S., "Review on Damping Behavior of Aluminum matrix composites" in the on "Emerging Trends, Simulation & Manufacturing-Key components of Make in India Initiative" held at Department of Mechanical Engineering, M S Ramaiah Institute of Technology, Bengaluru-560054, Karnataka during November 23-24, 2020.
- Madhu M C, Assistant Professor, Department of Mechanical Engineering, presented a paper entitled 'Hybrid DC-AC homes with Roof Top Solar power 'at the International conference on Renewable energy 2020 organized by PREMC from November 25th to 27th online .(venue : Rome, Italy).

Webinars Organised:

- Department of Mechanical Engineering organized an International Webinar on "Global Opportunities in Mechanical Engineering" 'by Ramesh Singh (Ir. Dr.) B.Eng. (UK), Ph.D. (UK), P.Eng., CEng. (UK), CPEng. (Aus), IntPE (Aus) FASc, FIMechE (UK), FIE Aust., Fellow, Academy of Sciences Malaysia Senior Professor of Mechanical & Materials Engineering, University of Malaya on 28th September 2020. This international webinar focuses on higher education, emerging areas of research, technology applications, best practices, and global advances for Mechanical Engineering aspirants.



- Department of Mechanical Engineering and IP Cell organized a Webinar on "Patentability of Mechanical Inventions" for III year students on 8th September 2020. Around 40 students attended the talk online. The program was coordinated by T. N Praveen Kumar, Associate Professor, Dept. of ME, BMSIT&M.

- Department of Mechanical Engineering and IP Cell organized a Webinar on “Importance of Materials in an Aerospace Domain” by Dr. Madeva Nagara, Deputy Manager, Aircraft Research and Design Center, HAL, Bengaluru on 11th September 2020. Around 40 students attended the talk online. The program was coordinated by T.N.Praveen Kumar, Associate Professor, Dept. of ME, BMSIT&M.

Consultancy work

- Prof. Keerthi Kumar, Assistant professor, Department of Mechanical engineering Carried out consultancy work for M.Tech project on combustion, performance and emissions test using Computerized CI engine for the candidates: Guruprasad. S, M.Tech student from SSIT, Tumkur and Akshay Kumar Shetty, M.Tech Student from SSIT, Tumkur.
- Dr. Nandini R, Assistant professor, Department of mechanical engineering conducted executive development program for L & T Mumbai officials on Overview of ANSI / ASTM standards and Ingress Protection rating on 27 October 2020 from 9:30 AM -5:30 PM successfully

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

Staff Recognition

- Dr. P. Ganesh, Associate Professor & Head, Department of MCA has been appointed as In charge Dean, Student and Alumni Services for BMSIT Connect project.
- Prof. Drakshaveni G, Asst. Professor, Dept. of MCA has been appointed as the member of BoE-MCA, VTU, Belagavi for 2020-21.
- Dr. P. Ganesh, Associate Professor, Department of MCA and Head-TPO, has been nominated as the member of the Sub-Committee that has been constituted to study and implement NEP-2020 at BMSET and BMSITM.
- Dr. P. Ganesh, Associate Professor & Head, Department of MCA delivered a talk on "Blockchain for Education" during 10th Series of Jnanavardhana at BMSITM on 23.06.2021.
- Dr. P Sudarsanam, Assistant Professor, Department of MCA was session chair for the INNOCENTRIC – 2021, Virtual Inter-Collegiate Project Competition held at Global Academy of Technology, Bengaluru on 23.07.2021.
- Dr. Aparna K, Associate Professor, Department of MCA attended two Doctoral Committee meetings as a member on 10.07.2021 for research scholars pursuing Ph.D. under VTU Research Center, Department of MCA, Ramaiah Institute of Technology, Bengaluru.
- Dr. Aparna K, Associate Professor, Department of MCA was a reviewer for the IEEE Region 10 Humanitarian Technology Conference 2021 hosted by Microsoft, in July 2021.

Invited Talks delivered by faculty members

- Prof. Dwarakanath G. V., Assistant Professor, Dept. of MCA has extended his support as resource person for the 5-day "Webinar on Raspberry Pi" organized by SJR Degree College, Bengaluru from 10.08.2020 to 14.08.2020.
- Prof. M. Sridevi, Assistant Professor,

Dept. of MCA has extended her support as resource person for the 5-day online FDP on "Trends in Data Analytics" organized by the Dept. of ISE, BMSITM, Bengaluru from 10.08.2020 to 14.08.2020.

- Prof. M. Sridevi, Assistant Professor, Dept. of MCA has delivered a talk on "Can we become a Change Maker?" on behalf of the Universal Human Values Cell of BMSITM during the VTU-B.E. Student Induction Program, on 22.12.2020.
- Prof. M. Sridevi, Assistant Professor, Dept. of MCA has extended her support as resource person for the 2 – days workshop on "Data Analytics and Visualization using Python with Case Studies" on 19.02.2021 and 20.02.2021 organized by Club Neon – Dept. of MCA, Brindavan Group of Institutions, Bengaluru.
- Prof. Drakshaveni G., Assistant Professor, Dept. of MCA has extended her support as resource person for a webinar on "Software Testing in Research" organized by Dept. of MCA in association with IQAC, Brindavan College of Engineering, Bengaluru on 17th May, 2021.
- Dr. Aparna K, Associate Professor, Department of MCA, delivered an invited talk (online) on "Augmented and Virtual Reality" on 10.06.2021 at the Department of MCA, Nitte Meenakshi Institute of Technology, Bengaluru. The beneficiaries were the students, faculty members and the research scholars.
- Prof. Shivakumara T, Assistant Professor, Department of MCA has extended his support as resource person and delivered a session on "Java for placement preparation" during the Open Course on "Object Oriented Programming with Java for Industry" on 01.06.2021 at Department of CSE, BMSITM.
- Prof. Shivakumara T, Assistant Professor, Department of MCA has

extended his support as resource person and delivered a session on "Hands on Attack Tools" during the Open Course on "Object Oriented Programming with Java for Industry" on 02.06.2021 at Department of CSE, in association with IEEE Computer Society, BMSITM.

- Prof. Dwarakanath G V, Assistant Professor, Department of MCA has extended his support as resource person and delivered a session on "Introduction to IoT and Applications" on 03.06.2021 at Department of ECE, BMSITM.
- Prof. Dwarakanath G V, Assistant Professor, Department of MCA has extended his support as resource person and delivered a session on "Introduction to IoT and IoT Projects" on 04.06.2021 at Department of ETE, BMSITM.

Corporate Training/Consultancy

- Prof. M. Sridevi, Assistant Professor, Dept. of MCA has extended her support as resource person for the corporate training program (online) on "Mathematics for Data Science" from 08.02.2021 to 12.02.2021 for the employees of Larsen & Toubro, India.
- Prof. M. Sridevi, Assistant Professor, Department of MCA has extended her support as resource person for a Webinar on "Monetization of Data using Data Science Techniques" streamed by L&T – CTEA, Madh, Mumbai on 28.07.2021.

Research Papers published in International Journals

- Drakshaveni G, "Ultrasound and thermal image enhancement technique using convolution neural network", International Journal of Advanced Research in Engineering and Technology (IJARET), ISSN Print: 0976-6480 and ISSN Online: 0976-6499, Volume 11, Issue 8, August 2020, pp. 769-781 - Scopus Indexed Journal.
- Aparna K, "Opinion Based

Recommendation System Using Sentimental Analysis", International Journal of Advanced Science and Technology, Vol. 29, No. 03, (2020), pp. 12657 – 12667, September 2020 - Scopus Indexed Journal.

- Venkatesh A., "Using Video conference Applications to Conduct Interviews during Covid-19 Pandemic", International Journal of Solid State Technology, Volume 63, Issue 5, ISSN 0038-111X, during September 2020.
- Drakshaveni G, "Naïve Bayes Filter for Communication & Enhancing Semantic in Email", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-9 Issue-4, November 2020.
- Venkatesh A., "Proficient IP Multimedia Subsystem automation framework", International Journal of Critical Reviews, Vol 7, Issue 13, ISSN: 2319-4847, during October 2020.
- Mutyala Sridevi and Arun Kumar B. R. "A Framework for Performance Evaluation of Machine Learning Techniques to Predict the Decision to Choose Palliative Care in Advanced Stages of Alzheimer's Disease." Indian Journal of Computer Science and Engineering (Scopus indexed) 12, no. 1 (Jan-Feb, 2021): 35-46.
- Reshma C R, Arunkumar B R, "Security Threat Identification and Prevention among Secondary Users in Cognitive Radio Networks", International Journal of Computer Science and Network Security, Vol. 21, Issue 5, May, 2021, Web of Science Indexed.
- Drakshaveni G, "Cyber World", Indian Journal of Natural Sciences, ISSN: 0976 – 0997, Vol.12, Issue 66, June, 2021, Web of Science Indexed.
- Shivakumara T, "Intrusion prediction and detection using support vector machine (SVM) and artificial neural network (ANN)", European Journal of Molecular & Clinical Medicine, ISSN 2515-8260 Volume 7, Issue 08, December 2020, pp: 5459-5466
- Arunkumar B R, "Method of Designing and Implementing Outcome-Based

Learning in Value Added Courses for Contemporary Skills which Enhances the Program Outcomes”, Journal of Engineering Education Transformations, Volume 34, No. 2, October 2020, ISSN 2349-2473, eISSN 2394-1707.

- Sudarsanam P, Dwarakanath G V, “Learning of Advanced Telecommunication Computing Architecture (ATCA)-based Femto Gateway Framework”, Lectures Notes in Networks and Systems, Vol. 209, pp: 375-392, Springer, DOI: https://doi.org/10.1007/978-981-16-2126-0_32, July 2021.
- Nirupama K, “Mobile App for Accident Detection to provide Medical Aid”, Learning and Analytics in Intelligent Systems, Vol. 21, pp: 269-284, April 2021, DOI: https://doi.org/10.1007/978-3-030-65407-8_23
- P. Sudarsanam, Anand R, Sumanta Banerjee, Hemanth R, “Resilience Test Case Automation for LTE Femtocell Networks”, IEEE Xplore, 5th International Conference on Intelligent Computing and Control Systems (ICICCS), 06.05.2021 to 08.05.2021, Madurai, India, ISBN:978-1-6654-4834-5, DOI: 10.1109/ICICCS51141.2021.9432331, Page No: 622-628.

Research Papers presented in the International Conference

- Shivakumara T, “Advanced wireless techniques to avoid accidents on roads through wearing Smart Helmet” In 5th International Conference on Intelligent Computing and Control Systems (ICICCS 2021) held at Madurai, India, organized by Vaigai College of Engineering during 06.05.2021 to 08.05.2021, IEEE Xplore ISBN: 978-0-7381-1327-2.
- Shivakumara T, “Emergency Medical Services Using Drone Operations in Natural Disaster and Pandemics” In 5th International Conference on Inventive Communication and Computational Technologies (ICICCT 2021) held at

Namakkal, Tamilnadu, India, organized by Gnanamani College of Technology during 25.06.2021 to 26.06.2021, Springer.

- Arunkumar B R, “AI based digital marketing strategies – A review”, International Conference on Inventive Computation and Information Technologies (ICICIT 2020) organized by RVS Technical Campus, Coimbatore from 24th to 25th September, 2020.
- Shivakumara T, “Advanced Wireless Techniques to Avoid Accidents on Roads through Wearing Smart Helmet.” In 5th International Conference on Intelligent Computing and Control Systems (ICICCS 2021), Vaigai College of Engineering, Madurai, India, May 6-8, 2021, IEEE Xplore ISBN: 978-0-7381-1372-2.

Expert Talks Organized by the Department

- Department of MCA organized an online expert talk on the topic “Practical Approach to Machine Learning” for the students of Dept. of MCA on 21.08.2020 delivered by Dr. Sailaja Kumar and Dr. Evangelin Geetha, Assistant Professors, Dept. of MCA, M. S. Ramaiah Institute of Tehnology, Bengaluru.
- Department of MCA organized an online expert talk on “Overview of C++ concepts” on 10.10.2020 delivered by Mr. Paresh Agarwal, Senior Manager – Samsung Electronics Pvt. Ltd.

Workshops organized by the Department

- The AICTE-ATAL sponsored 5-day Online FDP on “Cyber Security” was held from 07-09-2020 to 11-09-2020. This FDP was organized by the Department of MCA, BMS Institute of Technology and Management, Bengaluru and it was co-ordinated by Dr. Aparna K, Head, Department of MCA.

Faculty Achievements

- Dr. Aparna K. was granted Rs.93,000/- for the FDP proposal titled “Cyber Security” by “AICTE-ATAL Academy”

in the month of August, 2020. The 5-day Online was held from 07.09.2020 to 11.09.2020.

- Dr. Aparna K. has successfully completed an online course on “Blockchain Basics” offered by The State University of New York and University at Buffalo through Coursera in August, 2020.
- Prof. Shivakumara T. has successfully completed “Leadership and Emotional Intelligence” course authorized by Indian School of Business and offered through Coursera on 11.08.2020.
- Prof. Dwarakanath G.V., and Dr. P Ganesh were part of the team which filed a patent titled published a patent titled “Covid-19 Thermal Screening Using Smart Helmet” under the Textile category at Indian Patent Office vide Application number 202041036651 dated 25.08.2020 and publication Number 37/2020 dated 11.09.2020 page:39045.
- Prof. Venkatesh A. has completed a course on “Programming for Everybody” (Getting started with Python) from University of Michigan, offered through Coursera during August 2020.
- Prof. Drakshaveni G completed online course on “Convolution Neural Networks” offered through Coursera on 01.09.2020.
- Prof. Drakshaveni G. completed online course on “Programming for Everybody (Getting Started with python)” offered by University of Michigan through Coursera on 13.09.2020.
- Prof. Shivakumara T, Dr. Rajashekar M Patil, Dr. Shantakumar Patil, Dr. Premjyothi Patil, Ms. Nagashree N filed a patent with application number 202021038154 on 18.09.2020 with title of the invention “Prevent the sensitive data leakage in REST”.
- Dr. P Ganesh, and Prof. Dwarakanath were part of the team which filed a patent titled “Catastrophe Detection and Smart Rescue System Utilizing Android Smartphone with Real-Time Location Tracking” under the Communication category at Indian Patent Office vide Application number 202041049454 dated 12.11.2020 and publication Number 47/2020 dated 20.11.2020 page:59018.
- Prof. Shivakumara T. is the co-author for the book chapter titled “Artificial Intelligence and its application to headhunting” in the book “Advances in Computer Science” (Volume-11), Akinik Publications, Delhi.
- Prof. Nirupama K. has completed online course on “Leadership and Emotional Intelligence” and “Introduction to Artificial Intelligence (AI)” offered by Coursera.
- Prof. Drakshaveni G received Best Paper Incentive from BMSITM on 26.11.2020 for the paper titled “Ultrasound and thermal image enhancement technique using convolution neural network”.
- Dr. Sudarsanam P. has completed online course on “Introduction to Artificial Intelligence” offered by Coursera in association with IBM.
- Prof. Shivakumara T. was the reviewer of the research article titled “Upcoming Applications, Challenges, Need of Security and Future Scopes of Internet of Things (IoT) during February 2021 in Global Research and Development Journals (GRD).
- The team from the Department of MCA led by Prof. M. Sridevi, Assistant Professor with students of IV Semester MCA Mr. Manjunath H, Mr. Arjun U K, and Mr. Murali Krishna E secured place in the Top 275 ideas in the Grand Finale of Toycathon 2021 organized between 22.06.2021 and 24.06.2021, from 1567 finalists out of total 17770 ideas submitted. This event is conducted as a joint initiative by 7 ministries of Government of India in association with AICTE.

Alumni Interaction

- A motivational talk (Online) on “Architecting ME!” was organized by the Department of MCA on 26-09-2020. The speaker was Mr. Ranjith S

Rajan, Senior Manager – Software Engineering, Lowe's India Pvt. Ltd and 2005-08 batch – MCA passed out at BMSIT&M.

- A talk on “Growth Mindset – Reach your Potential” was organized by the Department of MCA on 17.12.2020. The speaker was Mr. Prasun Dhar, Senior NetSuite Solution Consultant (Pre Sales) at Oracle, Dubai, and 2004-07 batch – MCA passed out at BMSITM. Alumnus Mr. Prasun Dhar, Senior NetSuite Solution Consultant (Pre Sales) at Oracle, Dubai, and 2004-07 batch – MCA passed out at BMSITM, has donated 2 copies of the book “Emotional Intelligence 2.0” to the Department Library.
- The flagship program of mentoring students of II and IV semester students namely Lakshmi, Lavanya, Arjun U K, and Ashok by Alumni Mr. Aride C and Mr. Raghavendra T was initiated on 29.05.2021.
- A session on “Coding Tips and Preparations” by Mr.Raghavendra T A, Alumnus, 2014-17 batch was conducted on 12.06.2021.

DEPARTMENT OF MATHEMATICS

MoUs / Awards / Recognitions

- **Dr. KarabiSikdar**, Professor, Department of Mathematics **has been** selected in Scientific Committee for 1st International Conference on Renewable Energy and Green Technology (ICREGT-2020) – Virtual Conference from 09.10.2020 to 10.10.2020 organized by Department of EEE, SRM Institute of Science and Technology, Ghaziabad in Association with Institute for Engineering Research and Publication (IFERP)
- **Dr. KarabiSikdar**, Professor, Department of Mathematics has been selected as a member of National Advisory Committee for 1st International Conference on Recent Challenges in Engineering Science and Technology (ICRCEST-2K21), 9th – 10th April, 2021 organized by Department of Electronics & Communication Engineering, Ramachandra College of Engineering, Eluru, AP in Association with Institute for Engineering Research and Publication (IFERP).
- **Dr. KarabiSikdar**, Professor, Department of Mathematics has been selected as a **National Advisory Committee member** for 2nd International Conference on Futuristic Trends in Embedded Systems and Networking (ICFTEN-2021) Virtual Conference – 20th and 21st May, 2021 organized by RaoBahadur Y Mahabaleswarappa Engineering College, Ballari & IFERP.
- **Dr. Annapoorna M S**, Assistant Professor, Department of Mathematics has been selected as a Scientific Committee Member for 2nd International Conference on Futuristic Trends in Embedded Systems and Networking (ICFTEN-2021) Virtual Conference – 20th and 21st May, 2021 organized by RaoBahadur Y Mahabaleswarappa Engineering College, Ballari & IFERP.
- **Dr. Kallur V Vijayakumar**, Assistant Professor, Department of Mathematics has been awarded best research paper for his presentation in the International Conference on Recent Challenges in Engineering Science and Technology (ICRCEST 2K21) Virtual Conference, organized by Department of Electronics & Communication Engineering, Ramachandra College of Engineering, Eluru, Andhra Pradesh held on 09.04.2021 & 10.04.2021.
- **Dr. KarabiSikdar**, Professor & HOD, Department of Mathematics has been selected as a National Advisory Committee member for 2nd International Conference on Emerging Trends in Science, Engineering and Management (ICETSEM2021) 15th - 16th July, 2021 organized by GM Institute of Technology (GMIT), Davangere, Karnataka in Association with Institute for Engineering Research and Publication (IFERP).
- **Mrs. Sreelakshmi T K**, Assistant Professor, Department of Mathematics has been selected as a Scientific Committee Member for 2nd International Conference on Futuristic Trends in Embedded Systems and Networking (ICFTEN-2021) Virtual Conference – 20th and 21st May, 2021 organized by RaoBahadur Y Mahabaleswarappa Engineering College, Ballari & IFERP.
- **Dr. KarabiSikdar**, Professor & HOD, Department of Mathematics has been recognized as an **honorary Rosalind Member of London Journals Press** (Membership ID, #LP21502, valid for the quarter of this year), 24.05.2021.
- **Dr. KarabiSikdar**, Professor & HOD, Department of Mathematics has been selected as a National Advisory Committee member for International Conference on Innovative Challenges and Advances in Engineering & Technology: A Road to self-reliant India (ICAET – 2021) – Virtual Conference from 05.09.2021 to 06.09.2021, Organized by Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology (VIMEET) in

Association with **Institute for Engineering Research and Publication (IFERP)**.

- Dr. Karabi Sikdar, Professor & HOD, Department of Mathematics has been selected as a member of the Editorial Board of the GRD Journal since 21.07.2021.

Faculty as Resource Person:

- Dr. Annamma Abraham, Professor, Department of Mathematics has been the Resource person for the 5 day FDP, Recent trends in fluid mechanics conducted by Sapthagiri college of engineering, Bangalore from 17.11.2020 to 21.11.2020.
- Dr. Karabi Sikdar, Professor, Department of Mathematics delivered a talk on "Statistics with R Software" in Guest Lecture series, in SaiVidya Institute of Technology, Bengaluru on 17.02.2021.
- Dr. Karabi Sikdar, Professor & HOD, Department of Mathematics was the resource person in a Webinar under the program **Meet the Leaders**, Adamas University, Kolkata on 23.05.2021.
- Dr. Jojoy Joseph Idicula, Professor, Department of Mathematics was the resource person in a National Webinar on "Concepts and Applications of Probability and Statistical Methods for Students & Faculties" which was organized by the Dept. of Mathematics, SJCIT, Bengaluru on 10.05.201.
- Dr. Kallur V Vijayakumar, Assistant Professor, Department of Mathematics was the resource person for the expert talk Daily life applications of Mathematics at RRCE, Bengaluru on 28.05.2021.
- Dr. Karabi Sikdar, Professor & HOD, Department of Mathematics delivered a lecture on "Applications of Statistics with R-Software" in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.
- Dr. Annamma Abraham, Professor, Department of Mathematics delivered a lecture on "Applications of Linear Algebra in Machine learning" in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.
- Dr. Jojoy Joseph Idicula, Professor, Department of Mathematics delivered a lecture on "Sampling Distributions" in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.
- Dr. Chethan A S, Professor, Department of Mathematics delivered a lecture on "Mathematics in Machine Learning" in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.
- Prof. Anitha Kiran, Assistant Professor, Department of Mathematics delivered a lecture on "Queuing theory and its applications" in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.
- Dr. Annapoorna M S, Assistant Professor, Department of Mathematics delivered a lecture on "Introduction to Mathematical Modelling" in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.
- Dr. Kallur V Vijayakumar, Assistant Professor, Department of Mathematics delivered a lecture on "Algorithms in Data science and Machine Learning" in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.
- Prof. Sreelakshmi T K, Assistant Professor, Department of Mathematics delivered a lecture on "Multivariable

Calculus for Machine learning” in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.

- Dr. Pushpa B V, Assistant Professor, Department of Mathematics delivered a lecture on “Concepts of Linear Algebra for Machine Learning” in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.
- Dr. ShivaprasadNayaka S, Assistant Professor, Department of Mathematics delivered a lecture on “Concepts of number theory in Machine Learning” in the Open Course on Essential Mathematics for Data Science and Machine Learning, organized by Department of Mathematics from 01.06.2021 to 05.06.2021.

Reviewer for Journal / Conference:

- Dr. Annamma Abraham, Professor, Department of Mathematics has been the reviewer of a paper for International Journal of Applied and Computational Mathematics (IACM), Springer Journals on
- Dr. KarabiSikdar, Professor, Department of Mathematics has been the reviewer of a paper for the international journal “International Journal of Computer Mathematics: Computer Systems Theory”, Jan, 2021.
- Dr. KarabiSikdar, Professor, Department of Mathematics has been the reviewer of a paper for the international journal “Journal of Systems Science and Complexity”, 25th Feb, 2021.
- Dr. ShivaprasadaNayaka, Assistant Professor, Department of Mathematics has been appointed as Editor of Basic and Applied Science for Journal of Scholastic Engineering Science and Management (JSESM), 20.04.2021.

- Dr. Annamma Abraham, Professor, Department of Mathematics is a Reviewer, Board member for the Global Research and Development Journals.
- Dr. Annamma Abraham, Professor, Department of Mathematics is a reviewer of a paper for International Journal of Applied and Computational Mathematics (IACM), Springer Journals during April, 2021.
- Dr. Annamma Abraham, Professor, Department of Mathematics is a Reviewer of a paper for Springer Journals, SN Computer Science during May 2021.
- Dr. Karabi Sikdar, Professor & HOD, Department of Mathematics reviewed a research article for the journal “Global Research and Development Journals (GRD Journals)”, 09.07.2021.

FDP conducted/ organised:

- Department of Mathematics organized Five days National Level Online Faculty Development Programme on Linear Algebra and its Applications from 10.05.2021 to 15.05.2021. The program was coordinated by Dr. Annamma Abraham and Dr. Pushpa B V.

Expert talk organized:

- Dr. Kallur V Vijayakumar, Prof. Sreelakshmi T K and Dr. A S Chethan organized an expert talk on “Fourier Series, Fourier Transforms & its Applications” by Dr E. ChandiraSekaran, Professor, Department of EEE, Coimbatore Institute of Technology, Coimbatore for the students of III semester ECE-B, ECE-C, ETE and ISE-A on 25.09.2020 from 11.30 am-1.00 pm (Google meet).
- A Webinar on “Lessons for life” was conducted for the students of IV Sem EEE and IV Sem (lateral entry students) of ISE, CV and ME branches by Professional Counsellor Mrs.ChetanaSrinivas on 27.04.2021. This Webinar was coordinated by Dr.Jojoy Joseph Idicula and Dr.Annamma Abraham.

- An expert talk on Sequence design by using generalized boolean function was conducted for IV sem ECE-A, CSE-B and ISE-B students by Dr.SushantMajhi, IIT, Patna on 21.05.2021. This was coordinated by Dr.KarabiSikdhar and Prof. AnithaKiran.
- An expert talk on Curve fitting, real world applications was conducted for IV sem ISE-A & ETE students by Dr.J ayalatha, RVCE on 27.05.2021. This was coordinated by Dr.Chethan A S and Dr. Kallur V Vijayakumar.
- An expert talk on "Glimpse of Geogebra in Probability and Statistics" was conducted for IV Sem ECE-B and CSE-C section students by Dr. E. Prasad, Assistant Professor, Department of Mathematics, VNR VignanaJyothi Institute of Technology, Hyderabad on 21.06.2021 at 2:00 p.m. This was coordinated by Prof. Sreelakshmi T K.

Publication of Research Papers by the Faculty Members, BMSIT&M

- K. Sikdar- Modelling and analysis of a discrete-time GIX/Geom/1/K queue with N threshold policy, International Journal of Mathematics in Operational Research, 2020, Vol 17 (3), pg. no. 301-317, ISSN- 1757-5869 (Online), 1757-5850(Print) DOI: 10.1504/IJMOR.2020.10024979
- Pushpa B V- Optimization of thermosolutal convection in vertical porous annulus with a circular baffle, journal Thermal Science and Engineering Progress, Vol20, 1st Dec 2020. ISSN 2451-9049. DOI: 10.1016/j.tsep.2020.100735- Elsevier
- AnithaKiran- A drip irrigation modelling to fruit and vegetable crops using queueing theory, International Journal of Science, Technology, Engineering and Management (IJSTEM), 2020/12, Vol 2(4), pg no. 25-35. ISSN- 2582-5844 (Online).
- Rema.V. and K.Sikdar, Modelling and Analysis of Patient Flow at Inpatient Department of a Select Hospital, AIP Proceedings, March 26, 2021, Vol. 2336, 020012 (2021); DOI: [10.1063/5.0045850](https://doi.org/10.1063/5.0045850)
- Rema V and K. Sikdar, Optimizing Patient Waiting Time in the Outpatient Department of a Multi-specialty Indian Hospital: The Role of Technology Adoption and Queue-Based Monte Carlo Simulation, SN Computer Science, 2021, Vol 2, pg. no. 1-9, April, 2021. DOI: 10.1007/s42979-021-00595-8
- Rema.V. and K.Sikdar, Time Series Modelling and Forecasting of Patient Arrivals at an Emergency Department of a Select Hospital, Recent Trends in Signal and Image Processing. ISSIP 2020. Advances in Intelligent Systems and Computing, edited by Bhattacharyya S., Mršić L., Brkljačić M., Varghese 5 Kureethara J., Koeppen M. (eds), Springer, Singapore. April 2021, pg. no. 53- 65, Vol. 1333. DOI: 10.1007/978-981-33-6966-5_6
- AnithaKiran, K. Sikdar, Hanumanthappa.D.C and Mallesh.T.M. - A drip irrigationmodelling to fruit and vegetable crops using queueing theory, International Journal of Science, Technology, Engineering and Management (IJSTEM), 2020/12, Vol 2(4), pg no. 25-35. ISSN- 2582-5844 (Online).
- Annapoorna M S, Murali R and Manjunath G, "Tadpole Graphs and Their Laceability" IJIEMR, Vol 10 Issue04, Apr 2021, DOI: 10.48047/IJIEMR/V10/I04/31. (ELSEVIER)

Patent Publication:

- Sreelakshmi T K, "A compact IOT based Indoor air monitoring system", Application Number- 202141025148, Journal Number- 24/2021, -Indian Patent Office, published in Indian Patent journal, Journal Date: 11/06/2021.

International Conference:

- Dr. Karabi Sikdar presented a paper entitled "A Review on Analysis of Fuzzy Queueing System using DSW Algorithm" in the first International Conference on Renewable Energy and Green Technology (ICREGT-2020),

organized by Department of EEE, SRM Institute of Science and Technology, Ghaziabad, Uttar Pradesh from 09.10.2020 to 10.10.2020

- Mrs. Anitha Kiran and Dr.Karabi Sikdar presented a paper entitled “Drip irrigation modeling to fruit and vegetable crops using queueing theory” in the first International Conference on Renewable Energy and Green Technology (ICREGT-2020), organized by Department of EEE, SRM Institute of Science and Technology, Ghaziabad, Uttar Pradesh from 09.10.2020 to 10.10.2020
- Dr. Annamma Abraham, Professor, Department of Mathematics presented a paper entitled “**Impact of Blockchain Technology for Higher Educational Institutions**” at the 2nd International Conference on Adaptive Computational Intelligence (ICACI-2020) organized under IQAC by GSSS Institute of Engineering and Technology, Mysuru and in collaboration with University of Sannio, Benevento, Italy and Springer, on 16.12.2020.
- Dr. Karabi Sikdar, Professor, Department of Mathematics presented a paper entitled “Optimizing patient waiting time in the outpatient department of a hospital: the role of technology adoption and queue-based montecarlo simulation”, 2nd International Conference on Adaptive Computational Intelligence (ICACI-2020), organized under IQAC by GSSS Institute of Engineering & Technology for Women, Mysuru from 15.12.2020 to 16.12.2020.
- Dr. Kallur V Vijayakumar, Assistant Professor, Department of Mathematics presented a paper entitled Application of Splines for Approximation in the International Conference on Recent Challenges in Engineering Science and Technology (ICRCEST 2K21) Virtual Conference, organized by Department of Electronics & Communication Engineering, Ramachandra College of Engineering, Eluru, Andhra Pradesh held on 09.04.2021 & 10.04.2021.

Book Chapter:

- Dr.Pushpa B V published a book chapter entitled “Influence of thin baffle and magnetic field on buoyant convection in a vertical annulus” in the book Advances in Fluid Dynamics, Lecture Notes in Mechanical Engineering, Springer, Singapore, pp 105-119, 2020. ISBN 978-981-15-4308-1. DOI:10.1007/978-981-15-4308-1

Others:

- Prof. AnithaKiran, Assistant Professor, Department of Mathematics completed Ph.D Open seminar -I on 19.04.2021 through virtual mode.
- Prof. Sreelakshmi T K, Assistant Professor, Department of Mathematics completed Ph.D Open seminar -I on 20.11.2020 and Open seminar -II on 22.12.2020 through virtual mode.

DEPARTMENT OF CHEMISTRY

Faculty as Resource Person:

- Dr Jyothi C Abbar, Assistant Professor of Chemistry Department, has delivered an invited expert talk via Webinar on "Electrochemical Sensors", organised by Department of Basic Sciences, at Annasaheb Dange College of Engineering and Technology (Ashta), on 23.05.2021.

Reviewer for Journal / Conference:

- Dr Jyothi C Abbar, Assistant Professor, Department of Chemistry was a reviewer for RSC Advances, RSC Publishers (Scopus).
- Dr Jyothi C Abbar, Assistant Professor, Department of Chemistry was a reviewer for Journal of Porous Materials, Springer (Scopus).
- Dr. Sureshkumar K, Assistant Professor, Department of Chemistry was a reviewer for RSC Advances, Elsevier Publishers (SCI).

Publication of Research Papers by the Faculty Members, BMSIT&M

International Journal:

- Swetha G.A, Sachin H.P "A study on use of Telmisartan drug for corrosion inhibition of zinc in 0.1M hydrochloric acid: Surface characterization and Quantum studies" Chemical Data Collections, <https://doi.org/10.1016/j.cdc.2021.100668>, 28 Feb 2021.
- Jyoti Roy Choudhuri and Souvik Pandey "Zero-dimensional bromobismuthate: Synthesis and characterization" Materials Today: Proceedings Elsevier, ISSN: 2214-7853, <https://doi.org/10.1016/j.matpr.2021.05.296>, 3 June 2021.
- Souvik Pandey and Jyoti Roy Choudhuri "Zero-dimensional bromobismuthate: Synthesis and characterization" Materials Today: Proceedings Elsevier, ISSN: 2214-7853, <https://doi.org/10.1016/j.matpr.2021.05.669>, 17 June 2021.

- Varsha Raj Govindaraju, Kempahanumakkagari Sureshkumar, Thippeswamy Ramakrishnappa, Sreeramareddygari Muralikrishna, Devaramani Samrat, Ranjith Krishna Pai, Vanish Kumar, Kumar Vikrant, Ki-Hyun Kim, Graphitic carbon nitride composites as electro catalysts: Applications in energy conversion, storage, and sensor systems, Journal of Cleaner Production, Elsevier . ISSN 0959-6526 17 August 2021, 128693.
- G.Nataraja, B.M.Praveen, R.D. Pruthviraj, Sudhakara S, Ramesha, K. Sureshkumar, T. Ramakrishnappa, "Stress Corrosion Studies of AL 2014 alloy using synthesized pyrimidin derivative inhibitor in Different Concentration of HCl solution" Materials Today Proceedings, Elsevier. I S S N : 2 2 1 4 - 7 8 5 3 , <https://doi.org/10.1016/j.matpr.2021.05.294>, 10 June 2021.
- Samrat Devaramani, K Suresh Kumar, BP Suma, and M Pandurangappa, Rhodamine B phenylhydrazide as a new chemosensor for sulfite quantification: Application to food samples, Materials Today: Proceedings, Elsevier. ISSN: 2 2 1 4 - 7 8 5 3 , <https://doi.org/10.1016/j.matpr.2021.05.227>, 31 May 2021.
- G.Natarajaa, B.M.Praveen, R.D.Pruthviraj, K Sureshkumar, and T. Ramakrishnappa, Electrochemical behavior of heat treated AL 2014 alloy using Azithromycin compound in 3.5% NaCl solution, Materials Today Proceedings, Elsevier . ISSN : 2214-7853, <https://doi.org/10.1016/j.matpr.2021.05.291>, 28 May 2021.
- K Sureshkumar and Thippeswamy Ramakrishnappa, "A near infrared fluorescent probe for naked eye visualization and selective detection of hydrogen sulfide, Materials Today Proceedings, Elsevier . ISSN:2214-7853, <https://doi.org/10.1016/j.matpr.2021.04.512>, 24 May 2021.
- Raju Hajare, K Sureshkumar,

T.Ramakrishnappa, A.Saniya, K.Sourav and A. Amrutha, Study of Advances in Carbon Composites as Electrodes for Supercapacitors, Materials Today Proceedings, Elsevier . ISSN : 2214-7853, <https://doi.org/10.1016/j.matpr.2021.05.164>, 22 May 2021.

- Sreeramareddy Murali Krishna, K Sureshkumar, T Ramakrishnappa and K R Chethana, A rhodamine based dual chemosensor : Colorimetric recognition of Zn²⁺ and fluorimetric recognition of Sn⁴⁺, Materials Today Proceedings, Elsevier . ISSN:2214-7853, <https://doi.org/10.1016/j.matpr.2021.04.517>, 19 May 2021.
- BM Praveen RD Pruthviraj , K Sureshkumar, S Ramesh, Shubhra Jyostna Aithal and T Ramakrishnappa, Combustion synthesis of metal oxide nanoparticles: An efficient route to produce nano materials for diverse applications, Materials Today Proceedings, Elsevier . ISSN:2214-7853, <https://doi.org/10.1016/j.matpr.2021.05.174>, 20 May 2021.
- K Sureshkumar, T Ramakrishnappa and M Pandurangappa, Mercury speciation at trace level using fluorescien hydride as fluorescent probe, Materials Today Proceedings Elsevier, ISSN:2214-7853, <https://doi.org/10.1016/j.matpr.2021.04.507>, 20 May 2021.
- K Sureshkumar, and T Ramakrishnappa, Green synthesized uncapped Ag colloidal nano particles for selective colorimetric sensing of divalent Hg and H₂O₂, Journal of Environmental Chemical Engineering, <https://doi.org/10.1016/j.jece.2021.105365>, 2021,105365.
- K. Sureshkumar, and T. Ramakrishnappa, Piperzine appended naphthalamide scaffold as fluorescent turn on sensor for hydrogen sulfide, Microchemical Journal, <https://doi.org/10.1016/j.microc.2020.105019>, 157,2020, 105019.
- T. Ramakrishnappa, K. Sureshkumar, M.Pandurangappa, Copper Oxide Impregnated Glassy Carbon Spheres Based Electrochemical Interface for

Nitrite/Nitrate Sensing, Material Chemistry and Physics, <https://doi.org/10.1016/j.matchemphys.2020.122744>, 245, 2020, 122744.

Book Chapter:

- Dr Sureshkumar K has published a book chapter with the following citation: Kempahanumakkagari Sureshkumar Prashanth Shivappa Adarkatti, CHAPTER 13 Functionalized Macromolecules-based Disposable Sensors from the book titled Disposable Electrochemical Sensors for Healthcare Monitoring: Material Properties and Design, The Royal Society of Chemistry publishers, DOI: <https://doi.org/10.1039/9781839163364-00381>, 5 May, 2021,381-409. ePub eISBN :978-1-83916-337-1.

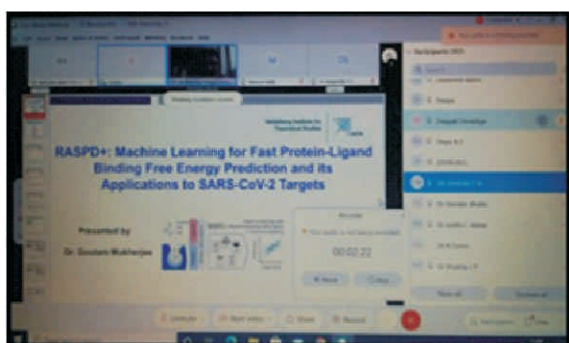
FDP/Webinar Conducted:

- On 19.09.2020, the Department of Chemistry has organized an International Webinar on "Applications of Mass Spectrometry in Chemistry and Beyond" was rendered by Dr Soumabha Bag, Ruhr-Universität Bochum Germany and offered enlightenment on Introduction to Mass Spectrometry in the field of Chemistry. The event was coordinated by Dr Ramakrishnappa T (Associate Professor & HoD, Department of Chemistry, BMSIT&M). The platform was Webex Platform.

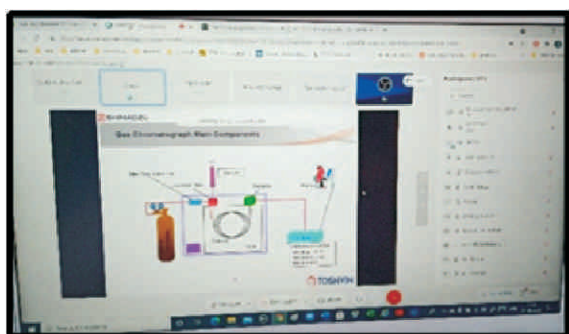


- On 03.10.2020, the Department of Chemistry has organized an

International Webinar on "RASPD+: Machine Learning for Fast Protein-Ligand Binding Free Energy Prediction and its Applications to SARS-CoV-2 Targets" was rendered by Dr Goutam Mukherjee, Heidelberg Institute of Theoretical Studies (HITS), Heidelberg University, Germany and offered enlightenment on Introduction to Molecular Modelling in the field of Chemistry. The event was coordinated by Dr Ramakrishnappa T (Associate Professor & HoD, Department of Chemistry, BMSIT&M). The platform was Webex Platform.



- Department of Chemistry has organized a National FDP on "Accelerating Innovations in Material Science – Surface Characterization" from 17.05.2021 to 22.05.2021. This FDP Programme provides an in detail concept about Modern Characterization Techniques in determination of materials structure, properties and performing various analysis. It is a fundamental process in the field of materials science, without which no scientific understanding of engineering materials could be ascertained.



International Conference:

- Department of Chemistry has organized an International conference on "Accelerating Innovations in Material Science (AIMS 2020)" from 04.08.2020 to 07.08.2020. Around 300 delegates, many eminent scientists & accomplished speakers from all over the country & world attended the on-line event, which took place from 4th to 7th August 2020. Under the theme current advancement in Material Chemistry, Physics & Engineering", it provided an on-line vibrant global platform to research community for learning, exchanging ideas, sharing knowledge, networking with fellow colleagues and scientists from various premier institutes like IISc, IITs & IISERs.



DEPARTMENT OF PHYSICS

WORKSHOPS/FACULTY DEVELOPMENT PROGRAMMES/ FESTS

FDP conducted/ organised:

Name of FDP:

Advanced Materials: Challenges and Opportunities In Upcoming Years

Date: 17th to 21st May, 2021.

Number of participants: 80

The rapid development in materials science and engineering requests the advanced materials in a more rational and designable manner. Beyond traditional synthesis techniques, control of material morphology, composition, and structure represents a highly integrated and versatile approach for device applications. Use and commercialization of advanced materials can help us tackle challenges and even improve the human life style. More recently, digital printing of chemically synthesized colloidal nanoparticles has paved the way towards manufacturing. Advanced materials are revolutionizing the way companies do business, demanding new types of R&D and engineering teams setup. Due to reduced costs and increased profitability, the companies focus on advanced materials development or applications. In views of this, the present FDP focuses on the understanding and assimilation of the rapid technological advances being made by academic /research institutes and industries in advanced materials for the near future. Focus is also made on opportunities available under NEP-2020 for promoting research in the field of advanced materials.

Resource Persons:

Prof. C.K. Jayasankar

Department of Physics, Sri Venkateswara University, Tirupati.

Dr. S.B. Bhanu Prashanth

Professor in Medical Electronics
BMSCE, Bengaluru.

Dr. Pramod Avti,

Department of Biophysics, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh.

Dr. Ashok Kumar

Applied Science Department
National Institute of Technical Teachers
Training and Research Centre,
Chandigarh

Dr. Manohar Rao

National Business Development Manager
for Pharma, PerkinElmer INDIA & South
Asia

Dr. Gopal K. Pradhan

Department of Physics, School of
Applied Sciences, Kalinga Institute of
Industrial Technology Deemed to be
University, An Institute of Eminence
(IoE), Bhubaneswar, Orissa, India

Dr. Urmila Kar

Professor, Education and Management,
NITTR, Kolkata

Open Course:

Name of Open Course: Materials for
Devices: An introduction to Engineering
Startups

Date: 1st to 5th June, 2021.

Number of participants: 8

Smart Materials play a vital role in making devices such as flexible electronic devices, Medical devices, Nano devices, sensors, energy storage devices and water purification devices etc., to make human life simple. This open course aims in familiarizing the participants with various device making materials, which can lead engineers to setup startup companies with the products made with these smart materials. Students of all engineering branches and aspirants who wish to take multi-disciplinary fields are most welcome to join this course

Resource Persons:

Dr. Naveen,

Presidency University, Bangalore.

Dr. Hareesh K,

School of applied sciences, Reva
University.

Dr. Udhaya Banu,

Centre for Research and Innovations.
Adichunchanagiri University, Mandya.

OPEN COURSE PICS:**Reviewer for Journal / Conference:**

- **Dr Basvaraj R B**, Assistant Professor, Department of Physics reviewed a research paper entitled "Electrochemical synthesis of CuO/ZnO/SnO nano photocatalysts for photodegradation of methylene blue dye, photo-voltaic and antibacterial activity studies" in **Chemical Data Collection (Elsevier)**
- **Dr. Daruka Prasad B**, Assistant Professor, Department of Physics, was a reviewer for Journal ACS Sustainable Chemistry & Engineering, Manuscript ID : sc-2020-08741v, Title : "Transparent and Hazy Ln(III)-Nanopaper with Color-Tuning, Photo-Switching, and White Light-Emitting for Traffic Lights, Anti-Counterfeiting, and Light-Softened WLEDs", Author(s): Zhang, Zhao; Ma, Ningning; Yao, Shuangquan; Han, Wenjia; Li, Xinpeng; Chang, Hui; Wang, Yao-yu.
- **Dr. Daruka Prasad B**, Assistant Professor, Department of Physics, was a reviewer for Journal - Journal of Alloys and Compounds, Ref: JALCOM-D-20-11425R1, Title: A user-secure and highly selective enhancement of latent fingerprints by magnetic composite powder based on carbon dot fluorescence.
- **Dr. C. Kavitha**, Assistant Professor, Department of Physics was invited to review a paper entitled "Graphene oxide / polymer composite coatings: preparation, characterization, and properties" for Mini-Reviews in Organic Chemistry journal.
- **Dr. Daruka Prasad B**, Assistant Professor, Department of Physics, was a reviewer for the Journal Arabian

Journal of Chemistry Ms. Ref. No.: ARABJC-D-21-00210, Title: Green Synthesis of ZnO Nanoparticles Using *Otestegialimbata* Extract, Characterization and Catalytic Potential.

- **Dr. Basavaraj R B**, Assistant Professor, Department of Physics, was a reviewer for the Journal Ceramics International, manuscript number CERI-D-21-02467R2.
- **Dr. Basavaraj R B** reviewed a paper titled " Rapid adsorption of phosphorus at Low concentration from water using a novel green organometallic material EGCG-Fe, Journal of Environmental Chemical Engineering (Elsevier).
- **Dr. C. Kavitha** reviewed a paper titled " SERS studies on SARS-CoVProtiens, RSC Advances (Royal Society of Chemistry) june 20, 2021.
- **Dr. Basavaraj R B** reviewed a paper titled " Rapid adsorption of phosphorus at Low concentration from water using a novel green organometallic material EGCG-Fe, Journal of Environmental Chemical Engineering (Elsevier).
- **Dr. Basavaraj R B** reviewed a paper titled " Radiative properties of 'Eu' in Li-Al-Si-O ceramics: effect of 'Si' to 'Li' ratio, Ceramics International (Elsevier).
- **Dr. C. kavitha** reviewed a paper of Sensors and Actuators-A: Physical (Elsevier).

International Journal publications:

- S. Pratibha, N. Dhananjaya, J. P. Shabaaz Begum & Pramod Halappa, Modified Benign approach for probing the structural, optical and antibacterial activity of Sm³⁺-doped Bi³⁺-co-doped LaAlO₃ nanoparticles, The European Physical Journal Plus, Volume 135, Article number: 651 (2020) Published : 12.08.2020.<https://link.springer.com/article/10.1140/epjp/s13360-020-00642-y>
- J.P.Shabaaz Begum, K.Manjunath, S.Pratibha, N.Dhananjaya, Prashant Sahu, Sushil Kashaw, Bioreduction synthesis of zinc oxide nanoparticles using *Delonix regia* leaf extract (Gul

- Mohar) and its agromedicinal applications, Journal of Science: Advanced Materials and Devices, 04 . 08 . 2020 , <https://doi.org/10.1016/j.jsamd.2020.07.009>
- R.B.Basavaraj ,D.Navami, N.H.Deepthi, M.Venkataravanappa, R.Lokesh, K.H.Sudheer Kumar, T.K.Sreelakshmi, Novel Orange-red emitting Pr³⁺ doped CeO₂ nanopowders for white light emitting diode applications, Inorganic Chemistry Communications, 120 (2020) 108164 . 04.08.2020<https://doi.org/10.1016/j.inoche.2020.108164>.
 - **Yashaswini, S.** Pratibha, R. Lokesh, N. Dhananjaya, C. Pandurangappa, Disaccharide assisted LaAlO₃:Ce³⁺ perovskite: structural and optical studies suitable for display devices, Inorganic Chemistry Communications, (2020) 108342. ISSN: 1387-7003 <https://doi.org/10.1016/j.inoche.2020.108342>. (Scopus)
 - G.R. Revannasiddappa, **R.B. Basavaraj**, M.S. Rudresha, G. Nagaraju, Santosh Kumar, N. Sasidhar, White-light emitting Ca₂MgSi₂O₇:Dy³⁺ nanopowders: Structural, spectroscopic investigations and advanced forensic applications, Vacuum, ISSN: 0042-207X, <https://doi.org/10.1016/j.vacuum.2020.109940>. (Scopus)
 - **Dr. Daruka Prasad B**, "Fabrication of flux supported SrTiO₃: Eu³⁺ fluorescent powders: New prospective of dual mode ink-free data security applications" , International Journal , Journal of Science: Advanced Materials and Devices, 2468-2179, Available online 7 December 2020, <https://doi.org/10.1016/j.jsamd.2020.11.004>
 - K.Lingaraju, R.B.Basavaraj, K.Jayanna, S.Bhavana, S.Devaraja, H.M.Kumar Swamy, G.Nagaraju, H.Nagabhushana, H.Raja Naika, "Biocompatible fabrication of TiO₂ nanoparticles: Antimicrobial, anticoagulant, antiplatelet, direct hemolytic and cytotoxicity properties", Inorganic Chemistry Communications, 127 (2021) 108505.
 - R.B. Basavaraj, SantoshKumar, D.P.Aarti, G. Nagaraju, H.M. Suresh Kumar, R.Soundar, T.S. Shashidhara, H.N. Sumedha, M. Shasank, "Color tunable orange-red light emitting Sm³⁺ doped BaZrO₃ nanopowders: Photoluminescence properties for w-LED applications, Inorganic Chemistry Communications", 22 (2021) 108577.
 - K.R. Bhagya, R.B. Basavaraj, K.R. Jyothi, H. Nagabhushana, M.V. Murugendrappa, A.P. Gnana Prakash, N.M. Nagabhushana, Dy³⁺ doped Y₂MoO₆ nanopowders for white light emission: Spectroscopic and transport properties for optoelectronic and energy harvesting applications, Colloid and Interface Science Communications, Volume 43, July 2021, 100447.
- FDP /Workshops/STTP attended (faculty):**
- **Dr. Daruka Prasad B**, Assistant Professor, Department of Physics attended the two days national level FDP program on Current Trends in Research, organized by Department of Physics, Tontadharya College of Engineering, Gadag, Karnataka from 19.08.2020 to 20.08.2020.
 - **Dr. Daruka Prasad B**, Assistant Professor, Department of Physics attended the Five day FDP program on Advanced nanomaterials, nanofabrication techniques and devices , organized by Department of Mechanical Engineering, BMS Institute of Technology and Management, Bangalore from 10.08.2020 to 14.08.2020.
 - **Dr. C. Kavitha** attended a webinar series conducted by innovation centre, BMSIT, Bangalore, 26.08.2020 to 28.08.2020.
 - **Dr. C. Kavitha** attended webinar series organized by ECSI-VTU, IISc, Bangalore. On 8th, 9th , 15th, 16th, 29.08.2020 to 30.08.2020.
 - **Dr. Daruka Prasad B**, Assistant Professor and Dr. Lokesh R, Associate Professor, Department of Physics organized a National webinar on

“Optical and Electrical Modelling Software for Semiconductor Devices” in association with Impluse Technology, New Delhi and Fluxim, Switzerland on 11.09.2020.

- **Dr. Dhananjaya N**, Associate Professor, Department of Physics National webinar on "Recent trends in the applications of FT-IR and UV-Visible Spectroscopy in Materials Science: Micro to nanoscale level" in association with PerkinElmer India Pvt. Ltd. Bengaluru, held on 24th September 2020.
- **Dr. Daruka Prasad B**, has actively participated in the International Webinar of “RASPD+: Machine Learning for Fast Protein-Ligand Binding Free Energy Prediction and its Applications to SARS -CoV-2 Targets”, organized by Department of Chemistry, BMS Institute of Technology & Management, Bengaluru, India on 3rd October, 2020.
- **Dr. Daruka Prasad B** has participated in One Week Online Short Term Training Program on “Emerging Tools and Technologies in Material Science and Engineering” organized by Department of Applied Physics, Jabalpur Engineering College, Jabalpur, Madhya Pradesh, India during 21st-25th September 2020.
- **Dr. Daruka Prasad B**, has participated in webinar “ Importance and need of Universal Human values in Higher Education”, Conducted by Department of Chemistry, Sai Vidya Institute of Technology, on 21/10/2020.
- **Dr. Daruka Prasad B**, has participated in a one week Faculty Development Program on “Recent Trends in Advanced Materials and Applications” Organized by Department of Physics, National Institute of Engineering”, from 19/10/2020 to 23/10/2020.
- **Dr. Daruka Prasad B**, has participated in Five day Faculty Development Program on “New Generation Solar Cells” Organized by Department of Physics, BNM Institute of Technology, Bangalore from 19/10/2020 to 23/10/2020.
- **Dr. R. LOKESH**, has participated in Five day Faculty Development Program on “New Generation Solar Cells” Organized by Department of Physics, BNM Institute of Technology, Bangalore from 19/10/2020 to 23/10/2020.2.

Sahayak Bot - ERYC 2020-2021:

- Interdisciplinary team from CSE and EEE, consisted of 4 members: Siddharth Ghodasara (EEE), Vineet Ranjan (EEE) Gaurav Sethia (CSE), Harish Kumar S Guragol (CSE) under the guidance of Mrs Shruthi.J, Assistant Professor(CSE). Here they unleashed an imagination and showed talent in programming an Autonomous Ground Vehicle (AGV) to make it capable of autonomously traversing an indoor environment to assist moving objects from one place to another. The scenario is that objects are being moved in e-Yantra's lab and there is short of manpower so Sahayak bot is used to help move the boxes from one place to another. The theme was divided into a number of tasks:

Challenges in this theme include:

1. 2D mapping and 3D mapping (SLAM)
2. Autonomous Navigation
3. Perception
4. Pick and Place.

This team had been selected as one of 7 finalists out of 465 teams in the Sahayak Bot theme and had been placed at 2nd position in finale under this theme. The competition was held on March 30 to April 3 2021 online.



KSCST PROJECT DETAILS

A total of twelve projects were funded by Karnataka State Council for Science and Technology: Student Project Programme-44th series 2020-21. The details are as follows:

- Three projects from department of Electronics and Communication Engineering were funded bearing title "Steganography Technique to Secure Patient Confidential Data Using ECG Signals", "Implementation Of Driver Drowsiness Detection And Accident Prevention Using An Autonomous Car", "Traffic Pal- AI Based Smart Traffic Controller" guided by Dr. Jayadeva G S, Dr. M C Hanumantha Raju and Dr. Vijayalakshmi G V respectively. Student team leaders are Ms. Megha Jain, Mr. Varun Venkatesh, Ms. Anushka Tripathi. An amount of Rs.3000/-, Rs.4000/- and Rs.4000/- was sanctioned respectively for the above mentioned projects.
- Three projects from department of Civil Engineering were funded bearing title "Hydrophobic Composite Roof Tiles From Waste To Enhance Rainwater Harvesting", "Appropriate Eco-Friendly Additives For Soil Liner To Restrain Migration Of Harmful Constituents In Leachate-A Case Solid Waste Disposal Site At Yelahanka", and "Design And Fabrication Of A Novel 'Prototype' For The Reduction Of Suspended Particulate Matter, For Improving Indoor Air Quality" guided by Mrs. Archana, Mrs. Shobha R, Dr. Rajesh Gopinath respectively. Student team leaders are Mr. Gaurav B R, Mr. Vivek Vedant, Ms. Sushmitha V. An amount of Rs.6000/-, Rs.5500/- and Rs.5500/- was sanctioned respectively for the above mentioned projects.
- Two projects from department of Electronics and Telecommunication Engineering were funded bearing title "Airborne Motion Tracking" and "A Deep Learning Algorithm to Detect Gaming Disorder Using EEG Based Emotion States", guided by Dr. Seema Singh and Mrs. Thejaswini S respectively. Student team leaders are Mr. Pranava K Bhait, Mr. Goutham C. An amount of Rs.4000/- for each project was sanctioned respectively.
- One project from the department of Computer Science & Engineering, Information Science & Engineering, Electrical & Electronics Engineering, and Mechanical Engineering were funded. The project titles are "Chest Computed Tomography Analysis for Probabilistic Determination of Coronavirus Infection", "Intelligent Waste Bot Using IoT and Deep Learning for a Smart City", "Supercapacitor Using Nanotechnology", and "Novel Approach to Flexible Drones Structures" guide by Dr. Sunanda Dixit, Dr. Rudresh S, Dr. Prashanth N A & Dr. Rama Rao N, and Mr. Sriganesh T G. Student team leaders are Mr. Aman Rai, Mr. Hari Prasad D B, Ms. Amrutha S R, Mr. Prajwal R Patil. An amount of Rs.2000/, Rs.5000/- Rs.7000/-, and Rs.6000/- was sanctioned respectively for the above mentioned projects.

INTELLECTUAL PROPERTY (IP)CELL

PATENT APPLICATION FILED DETAILS

Total No. of Patent Application Filed : 30
 No. of Patent Granted : 01
 Total No. of Industrial Design Application Filed : 01

Year Wise Patent Filed Details

Academic Year	Total
2017-18	01
2018-19	01
2019-20	02
2020-21	26
Total	30

Patent Application Filed Details:

Academic Year: 2020-21

- 1) Title of the Invention: **A System for an Improved Hearing Aid**
 Application Number: 202041044874,
 Date of filing: 15-10-2020
 Inventors: Prof. SARITHA I. G, Assistant Professor, Dept. of ETE, Shashank Srinivas Kathavate (1BY16TE045), Aditya V Kulkarni (1BY16TE004), Prajwal P.S (1BY16TE033), Sudhanva Rao P.N (1BY16TE049)
- 2) Title of the Invention: **Mobile Railway Track Fault Detection System with Internet of Thing and Machine Learning**
 Application Number: 202141000383,
 Date of Filing date: 05-01- 2021
 Inventors: Vinutha K, Assistant Professor, Department of ISE
 Student Inventor: Jayanth G, Nikhil S, Pathan Aseef Khan, Students of ISE
- 3) Title of the invention: **Novel approach for class recording & blackboard cleaning system and methods thereof**
 Inventors: Prof. Vinod B R, Prof. Shobha R , Assistant Professor, Dept. of CV and Team
 Application number: 202041041304,
 Date of Filing: 23-09-2020
- 4) Title of the invention: **Covid-19 Thermal Screening Using Smart Helmet**
 Application number: 202041036651

Date of Filing date: 25-08-2020
 Date of Publication: 11-09-2020
 Inventors: Prof. Dwarakanath G V, Assistant Professor, Dept. of MCA, Prof. Banuprakash R & Prof. Siddiq Iqbal, Assistant Professor, Dept. of ETE,
 Prof. Vishakha Yadav, Assistant Professor, Dept. of CSE,
 Dr. Ganesh P, Associate Professor, Dept. of MCA,
 Prof. Saneesh Cleatus T, Associate Professor, Dept. of ECE,

- 5) Title of the invention: **IOT Enabled Smart Health Care Automation System**
 Inventor: Dr. Dankan Gowda V, Assistant Professor, Dept. of ECE and Team
 Application Number : 202041040896, Date of Filing: 21-09-2020
- 6) Title of the Invention: **Far Field and Near Field Radiation Pattern of Gold Nano Particle in Mie Scattering Phenomenon Modelling using DGTD Method**
 Inventor: Dr Bharathi M A, Professor & HoD, Dept. of AI&ML
 Divya (1BY18SCS03) and Team
 Application Number: 202041041906,
 Date of Filing: 27-09-2020
- 7) Title of the Invention: **An Apparatus for Interactive Information Exchange Through Machine Learning**
 Application Number: 202041051008,
 Date of Filing: 24-11-2020
 Inventors: Dr. Satish Kumar T, Assistant Professor, Dept. of CSE and Team
- 8) Title of the Invention: **Effective Feedback System of Managements of Educational Institutions Using Artificial Intelligence and Methods Thereof**
 Application Number: 202041047650,
 Date of Filing: 01-11-2020
 Inventors: Dr. Satish Kumar T, Assistant Professor, Dept. of CSE.& Team.

- 9) Title of the Invention: **Catastrophe Detection and Smart Rescue System Utilizing Android Smartphone with Real-Time Location Tracking**
 Application Number : 202041049454A,
 Date of filing :12-11-2020
 Inventors: Prof. Siddiq Iqbal & Prof. Banuprakash. R Assistant Professor, Dept. of ETE,
 Prof. P. Ganesh, Associate Professor, Dept. of MCA,
 Prof. Saneesh Cleatus. T, Associate Professor, Dept. of ECE,
 Prof. Vishakha Yadav, Assistant Professor, Dept. of CS&E,
 Prof. Dwarakanath. G.V, Assistant Professor, Dept. of MCA,
- 10) Title of the Invention: **A Novel Compact Printed Antenna Loaded with Hexagonal Complementary Split Ring Resonators (HCSRR) For Penta Band Wireless Applications**
 Application Number: 202041047659 A
 Date of filing: 01-11-2020
 Inventors: Prof. Banuprakash. R, Assistant Professor, Dept. of ETE and Team
- 11) Title of the Invention: **Shabdkosh Device for Women Safety in Public**
 Inventors: Dr. Usha B A, Associate Professor, Dept of CSE and Team,
 Application Number : 202041044161, Filing Date: 09-10-2020
- 12) Title of the Invention: **"Students Posture & Gesture Detection system using Artificial Intelligence and Methods thereof**
 Inventors: Dr. Usha BA Associate Professor, Dept. of CSE
 Dr. Anupama H S, Associate Professor, Dept. of AI&ML, Dr Sathish Kumar T, Assistant Professor, Dept. of CSE and Team
 Application Number : 202011046511, Filing Date: 09/10/2020
- 13) Title of the Invention: **A compact IOT based Air monitoring system**
 Applicant: Sreelakshmi T K, Assistant Professor, Dept. of Maths and Team
 Application Number : 202141023368,
 Date of Filing: 25/05/2021
- 14) Title of the Invention: **Smart Ticketing System for Smart Cities**
 Inventor: Dr. Hema Malini B H, Associate Professor, Dept. of CSE and team
 Application Number : 202141026348,
 Date of Filing: 14-06-2021
- 15) Title of the Invention: **Interpersonal Skill Score Card for Students Using Artificial Intelligence and Method Thereof**
 Applicant: Dr Usha BA, Associate Professor, Dept. of Computer Science & Engineering
 Application Number:202041045225,
 Date of Filing:16-10-2021
- 16) Title of the invention: **Security Technique in Energy Harvesting IOT Devices Using Slotted Aloha with NOMA**
 Applicant: Dr. Veena N, Prof. S. Mahalakshmi, Assistant Professor, Dept. of ISE
 Application Number: 2021100913,
 Date of Filing: 18-02-2021
 Date of Grant: 14 -04-2021,
- 17) Title of the invention: **Prevent the Sensitive Data Leakage in Rest.**
 Applicant: Prof. Shivakumara T, Assistant Professor, Dept. of MCA
 Application Number : 202021038154,
 Date of Filing: 04/09/2020
- 18) Title of the invention: **Cold Formed Steel hybrid double T Box Girder**
 Inventor: Prof. MS Deepak, Assistant Professor, Dept. of CV and Team
 Application Number : 202141013917,
 Date of Filing: 29-03-2021
- 19) Title of the invention: **Customized Placement Training assistance for students using Artificial Intelligence**
 Inventor/Applicant: Shobha R, Assistant Professor, Dept. of CV and Team

Application Number :
202041042414,

Date of Filing: 29-09-2020,

- 20) Title of Invention: **Occupational stress model and coping strategies thereof**

Inventor/Applicant: Prof. Shobha R and Prof. Vinod B R, Assistant Professor, Dept. of CV

Dr. Sunanda Dixit, Associate Professor, Dept. of CS&E and Team

Application Number :
202041041755,

Date of filing: 25-09-2020

- 21) Title of the invention: **Novel Hybrid Lightweight Framework Logical Security Devices for Internet of Things**

Inventor: Prof. Girish Babu C N and Prof. Chandrashekhara K T , Dept. of ISE

Application Number :
202141027418,

Date of Filing: 18-06-2021

- 22) Title of the invention: **Intelligent Mechanical Robotic Weed Controller for Sugar Beet Production.**

Inventor: Dr. N Keerthi Kumar, Assistant Professor, Dept. of ME & Team

Application Number :
202141026549,

Date of Filing: 15-06-2021

- 23) Title of the invention: **Indian crop and fertilizer recommendations system using AI and Machine Learning**

Inventor: **Prof. Swetha**, Assistant Professor, Dept. of ISE,

Students: Rakshith Danti (1BY19IS130)

Praveen N M (1BY19IS121),

K Bhuvan Sai (1BY19IS083),

Mayur G N(1BY19IS093),

Application Number:202141032290,

Date of Filing: 18-07-2021

- 24) Title of the invention: **Animal treatment kit using artificial Intelligence & Method thereof**
Inventor & Applicant: Dr Sathish Kumar T , Assistant Professor, Dept. of CSE,

Application Number :
202041048621,

Date of Filing: 06-11-2020

Date of Publication: 13-11-2020

- 25) Title of the Invention: **Fruit Classification and Identification Using Advanced Machine Learning Techniques**

Inventor: Dr. Arunakumari B N, Assistant Professor,

Dr. Bhuvaneshwari C M, Professor and HoD, Dept. of CSE and team

Application Number :
202141036457,

Date of Filing: 12-08-2021

- 26) Title of the Invention: **Method for Plant Disease Detection using Machine Learning and Methods Thereof**

Inventors: Dr Narasimha Murthy M S and Team

Application Number :
202141010619,

Date of Filing: 12/03/2021

DESIGN REGISTRATION DETAILS (2020-21)

Title: **Cost effective Ventilator Using CO₂ laser cutting machine for COVID-19**

Applicant Name: Dr Keerthi Kumar N, Assistant Professor, Dept. of Mechanical Engineering and Team

Application Number: 342442-001,

Cbr Number: 202675,

Cbr Date: 15-04-2021

SALIENT FEATURES OF THE CURRICULA OF AUTONOMOUS BMSIT&M

Towards the attainment of such a holistic and multidisciplinary education, the flexible and innovative curriculum has been provided at BMSIT&M with credit-based courses and projects/internships/special courses in the areas of community engagement and public service, environmental education, and value-based education.

With this preamble, the curricula for the autonomous BMSIT&M has been designed to meet the contemporary needs (aspirations) of primary stake holders (students) with the following.

Key features.

1. **Induction Programme:** There will be a 3-week long induction program for the UG students entering the institution. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the **self, people around them, society at large, and nature**. The incumbents learn about the institutional policies, processes, practices, culture and values.
2. **Program Outcomes (PO) Based Curriculum:** The curricula for all the programs is designed to meet the graduate attributes (Program Outcomes) defined by National Board of Accreditation which are based on the knowledge, skill, ethics and behaviour.
3. **Emphasis on Practice Based Learning:** To impart the skills to the prospective engineers, the emphasis on practical sessions is extended in the curricula for all the programs. At each semester, the adequate amount of practical/laboratory courses are included. Further, some of the theory courses are blended with hands on sessions.
4. **Industry exposure through Mini projects and Internships:** The curricula includes industry internships and mini projects for the students to expose them to the real-world experience at industrial environment.
5. **Scope for inter-disciplinary learning:** The curriculum provides adequate number of core and open elective courses for the students to gain the inter-disciplinary knowledge. These courses enable the students to solve the societal problems.
6. **Self-Learning:** The curriculum provides with an opportunity for the students to take the initiative, with or without the assistance of others, in diagnosing their **learning** needs, formulating **learning** goals, identifying human and material resources for **learning**, and evaluating **learning** outcomes.
7. **Sports/Yoga:** Sports, Yoga, NCC and NSS activities are well encouraged at the campus and students are given opportunities and required guidance to attain the outcomes. The course on the Sports Education and Yoga (with credits) is included in the curriculum.
8. **Multiple avenues based on aspirations of the students:** The students will study the program specific courses for first two years. From V semester onwards, the students have the option of selecting one of the following streams based on their aspirations. There are four major avenues for the aspiring students to pursue :
 - **Industry/Placement:** The students who are aspiring to work as professional engineers in their core industrial domain have the option of studying the courses in the curriculum which are aligned towards the placement opportunities.
 - **Entrepreneurship:** The students who are interested in the entrepreneurship, will have the option of selecting the courses in that stream. Students study the course Entrepreneurship and Management in 5th semester followed by internship and projects. The project and internships will be usually on understanding what drives consumer behaviour and purchase decisions is at the heart of a successful business plan.

- **Higher Education:** The curriculum provides an opportunity for the students to pursue the courses which are in support of higher education (GATE).

Curricular inputs for the framework are from all the stakeholders involved in the academic process and referring curriculum from standard and well-known universities/colleges. Input for the framework is also from professional bodies of the respective program discipline which recommends the basic and advanced courses for the UG program of 4 years.

- The expected learning outcomes of autonomous curriculum of BMSIT&M caters to the aspiration of learner in-terms of higher education (Captone), Entrepreneurship, holistic development (HSS), industry requirements. Develop learner's inquisitiveness and focus on research and development of disruptive technologies.
- Incorporation of ICT tools imperatively blended in the autonomous curricula reaching all class of learners.

The emphasis is more on the core competency in the curriculum of the program to enhance opportunities for placement through industry relevant courses as program core and program electives. This is effectively attained with proper design, operation and improvement in academic components in the system with inclusive focus on Modern teaching methods, advanced curricula, innovative assessment methods, research temperament, industry associated curriculum. Implementation of academic autonomy can be with supportive governance and administrative structure is properly planned and put in place. Academic council, Board of Studies and Board of Examiners has been approved and their constitution is as per the guidelines of UGC. Further the UGC committee visited on 20th and 21st Jan 2021 and has conferred the autonomous status on 17th Feb 2021. This was further approved by VTU on 8th Jun 2021.

e-STUDIO

BMSIT & M Inaugurated e-STUDIO at BSN Block 1st floor on 31st March 2021 for online class/ Executive talks/Guest talks recording with High quality video and Audio facility. Studio is well equipped with Recorder, Amplifier, Interactive display ,high speed internet, Best acoustics, HD quality Cameras, ELMO 3D Projector ,Best lighting facility etc.

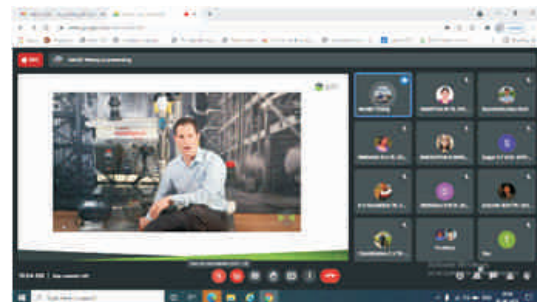


ACTIVITIES CONDUCTED BY THE IETE STUDENT FORUM

1. An Expert talk on "Introduction to IOT automation applications"

During the Five Day open course on "Advanced Networking and IOT Applications", an expert talk "Introduction to IOT Automation Applications", was delivered by Mr Abhijith Telang , Business Development Manager at Softcell Technologies Private Limited .This session was organized in collaboration with IETE Student Forum, BMSIT&M . The topics like Introduction to IOT, its features and its automation in various applications were highlighted. The complete insight on innovation in IOT its automations in various applications including inter disciplinary domain as well as current status and future prospect of IoT were discussed in detail.Sir also showed some demonstrations on IOT projects which he had carried till now. Session was very informative, various concepts on IOT projects were cleared. The program was coordinated by Prof. Thejaswini S (IETE Coordinator),

Assistant Professor, Dept. of ETE and Prof. Saritha I G, Assistant Professor, Dept. of ETE.

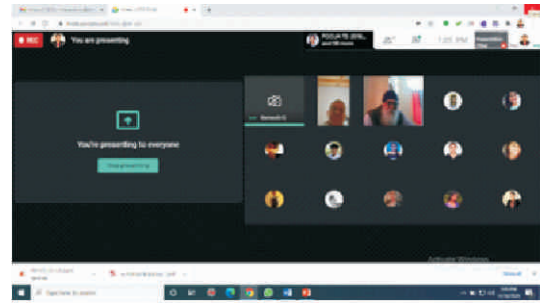


Session by Mr Abhijith Telang

2. Webinar on "Over View of IETE Student Membership"

Under IETE Student Forum of BMSIT&M, a webinar on "Over View of IETE Student Membership" was organized on 30th November 2020 at 12.00pm to 1.15 pm . Around 71 students of 3rd and 2nd year ETE students attended the webinar. The talk was delivered by Mr. Ramesh G Chairman of Membership Committee of IETE Governing Council, also currently he is head of Components

Division at U R Rao Satellite Center, ISRO. He highlighted on the goal of IETE, various activities that can be conducted.



ROTARACT CLUB OF BMS YELAHANKA

A wonderful year under the leadership of talented people. Rotaract club of BMS Yelahanka has been successful in contributing to the welfare of the society and its people. One year of great initiatives taken up by the students of BMS Yelahanka as members of the Rotaract club.

Board of Directors 2020 - 2021

EVENTS

- Lime green initiative conducted a Webinar on "Let's Talk Pride" aiming to know about our Personal Space and LGBTQ+ Community on 4th July 2020 chaired by N S Sriprasad, sergeant at arms and co-chaired by Roobini G. Ms. Priya Thammaiaha, a counselling psychologist, who gave insights about the former topics.

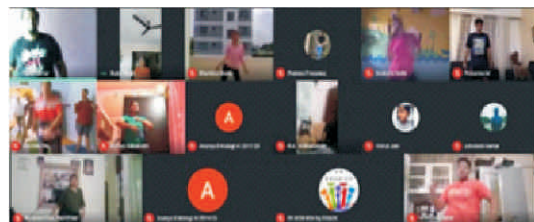
Pratyahara

- A two day yoga workshop was hosted as a community service project focusing on mental health & cardiovascular disease and was conducted on 18th and 19th of July 2020, chaired by Suprith PN, community service director and co-chaired by Narmadha K. The trainers for the days were Mr. Rahul Achari & - Mrs. Shilpa Vij Premchandaani respectively.



Leaps and Beats

- A two day Zumba workshop was hosted in collaboration with ALFAA (Assisted Living for Autistic Adults) as a community service project on 24th and 25th of July 2020 and was chaired by Rtr. Bhumika Dinesh Shetty, Deputy Community Service Director and Co-chaired by Rtr. Vishal Jain. Trainer for both the days was Mr Kiran Kumar who is a professional dancer and Zumba trainer.



Mask Donation Drives

- We reached out to Nisarga Grama, a school run by The Sparsha Trust in Yelahanka which is housing and schooling close to 100 children during the COVID 19 pandemic and donated 120 masks.
- On the 2nd of October, 2020, we gifted homemade cloth masks stitched with love by our selfless and dedicated

member, Rtr. Karunya Shankar. The club performed this activity in Cubbon Park, gifting every sweeper and maintenance staff with 1 cloth mask each. We collectively gifted cloth masks to 15 housekeeping workers of Cubbon Park.



Organ Donation Awareness Week

- An Organ Donation Drive was hosted in Partnership with Organ India, Rotaract Club of Indiranagar & Rotaract Club of Bangalore Junction from 8th - 13th August 2020. Chaired by Rtr Roy George, Vice President and co chaired by Rtr. Sanju S P. The event witnessed over 20 donors registering for the drive.

Cloth pads & menstrual cups donation camp

- As a follow-up drive to Ready Steady Flow we raised funds and donated it to the NGO Janani - Jeevan Ka Aadhar. Under the guidance of Dr.Aastha Singh' s and RID 3190 MHM Committee, we were able to sponsor Aaram cloth pads manufactured by Rotary 3190. These kits were gifted to 2 Asha workers in general hospitals Kanakapura, Ramanagara district on 12th August 2020.



Blood Donation drive

- A Blood Donation drive was organized by The Rotary Club of Bangalore, Yelahanka in partnership with the Rotaract Club of BMS Yelahanka. The event was graced by the MLA of Yelahanka, S.R Vishwanath. conducted on 23rd August 2020, The camp witnessed a collective donation of 77 blood units. 6 Rotaractors participated in the awareness cycle rally from our club to escort the mobile medical van from New Town Club to Purva Venezia while spreading awareness of Blood Donation on our way.



Plantation Drives

- An inaugural project marking the beginning of our adopting Chikkanna Hosahalli village, Karnataka, This project was a kind gesture to understand the requirements of the villagers, their Panchayat and indulge them in a collaborative activity, making our bond stronger. On 31st October 2020, 50 saplings of Tamarind and Silver Oak was collectively planted in the adopted village, Chikkanna Hosahalli! This plantation was carried out in partnership with Wildlife Awareness and Conservation Club (WACC), SJC Autonomous.



- 20 blackberry saplings were planted in Adiganahalli. on 12th September 2020. These saplings were planted on the road sides.



Electro Wheels Campaign

- A social media campaign in collaboration with Tata Motor 's Nexon EV from the 22nd September, giving out to our followers the benefits of switching to electric vehicles to the environment. On the 24th September, Mr Jaya Suryaa delivered a webinar on the benefits of being an early adopter of Electric vehicles. On the 1st October, a talk about the rally was delivered on RadioCity Kannada Fm91



Home Agro Drive

- The drive intended to motivate the citizens of the world to acquire the hobby of home gardening and farming as we approached World Food Day,

16th October 2020. The drive began on September 1st and marked its end on October 15th. All participants were awarded certificates signed by DRR | 3190, Rtr. Raj Vamshi and Hasiru Committee Chairperson | 3190, Rtr. Manjunath Nag. This activity was also affiliated to the social work credits awarded by AICTE for the degree credit qualification.



Vidyarambham

- **Phase-1**

A literacy mission initiated by Rotaract club of BMS Yelahanka to provide education to needy students, conducted from 28th November 2020 – 07th January 2021. Rotaract Club of BMS Yelahanka has adopted a village Chikka Hosahalli near Devanahalli, Bengaluru Rural and the literacy committee of RCBMSY has pledged to educate students and develop basic communication skills in children. As part of this goal, the team is taking weekly classes to children at the village (approx. 30 children). 15 volunteers are helping in imparting the basics of English, Science and Maths.





Wins session at Rajanakunte govt. school

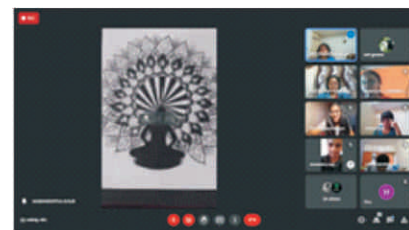
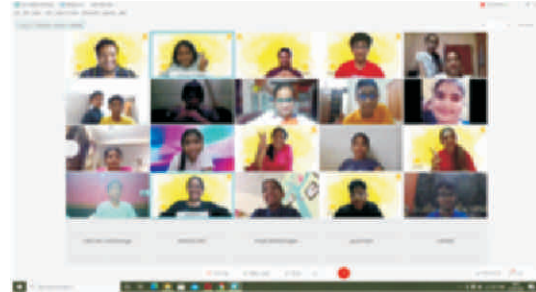
- The Wins Committee of Rotaract Club of BMS Yelahanka Organised and Conducted a One Day Hand Wash Program in Government School of Rajankunte on 29th March 2021. Taught students the right method of washing hands, importance of health and hygiene and importance of sanitation during this pandemic period.



Eureka Summer Camp

- An online summer camp on google meet was conducted for the students from grade 6th to 9th of Airforce school, Hebbal from 02nd to 11th June wherein the students were divided into two

batches which worked simultaneously on the decided timings. The students were engaged with lots of activities which were mentored by the Rotractors and Professionals.



Gratitude month

- Rotaract Club of BMS Yelahanka started an initiative LIME GREEN on 27th April 2020 for the awareness of mental health and its benefits. We have conducted a lot of therapy sessions by our renowned psychologists and other activities on instagram and other platforms. Gratitude month went from May 10th - June 10th which included a 30 days gratitude challenge along with small activities on the weekends during the month. Around 25+ participants celebrated the 30 days gratitude challenge, where each day everyone posted a story on something meant for that particular day like Day 1 - grateful for parents...Day 30 - grateful for everyone who was part of this challenge



'COVID-19 and its Vaccination' Awareness Drive

- The Student COVID Warrior Program is basically designed to train the students to be ready to help anyone around them with issues related to the pandemic. As a token of appreciation we are awarding the eligible participants with Certificate of Completion and 13 AICTE Activity Points.



ACTIVITIES OF OIKOS CLUB

During the initial phases of Lockdown due to advent of COVID-19, OIKOS as a means to sensitize and create awareness among its member fraternity about perils of Coronavirus and direct/inadvertent consequences on Environment; had organized a Cartoon Competition; with theme as Covid-19 & Environment. The result was encouraging, with Akshaya, Madhumita and Sanif winning the 1st, 2nd and 3rd prize respectively, based on results declared by external judges.



Ms Harshitha (Student member-OIKOS) deserves a special mention for her Achievement during lockdown for indulging in 14 relevant Environment based MOOCs offered by United Nation.

As part of CSER activity of OIKOS (BMSIT& M), and also for facilitating Institute's Societal Greening Initiative (under Smart Campus & Green Campus guidelines); and for supporting AICTE Activity points; "Home Agro Drive" was being carried out by students from 1st September to 15th October 2020. This was a joint initiative between OIKOS, NGO Hasiru Committee and Rotaract Club of BMS Yelahanka. Knowledge transfer of which would be shared further by Rotaract Club to villages towards improving their standard of living, health and sustainable growth.

Welcoming 2021 in the right Earnest, OIKOS was instrumental in drafting of the Environmental Policy for BMSIT. The document was ratified on 1st January 2021. This was one of the major requisites sought by UGC in March 2021 w.r.t. it's Framework for Eco-Friendly and Sustainable Campus Development in Higher Educational Institutions.

As part of Outreach of OIKOS, Dr Rajesh Gopinath (Associate Professor & HoD, Dept. of Civil Engineering & Key Liaison-OIKOS) was a Resource Person via ZOOM with Expert Talk on "Urban Warming: Need for Climate Sustainability in Smart Cities", on 11th January 2021; during the Refresher Course in "Environmental Science / Education; sponsored by UGC, Human Resource Development Center (HRDC) at Savitribai Phule Pune University, Pune from 5th January 2021 to 18th January 2021.

On the occasion of World Environment Day (5th June 2021); OIKOS had floated an Online Environmental Awareness Quiz upon the Theme "How much do you know about World Environment Day", to enhance Environmental Sensitization across all types of Stakeholders in India. The quiz was attempted by more than 2500 participant from across India.

On the Eve of World Environment Day, Dr Rajesh Gopinath had also presided as the Chief Guest in World Environment Day Celebrations; organised by the Federation of International Students Associations Bangalore (FISA-B) and Indian Council for Cultural relations (ICCR) viz the Online Platform. He spoke about Relevance of World Environment Day; via Google Meet

3. A Report on "Successful Parenting during Pandemic"

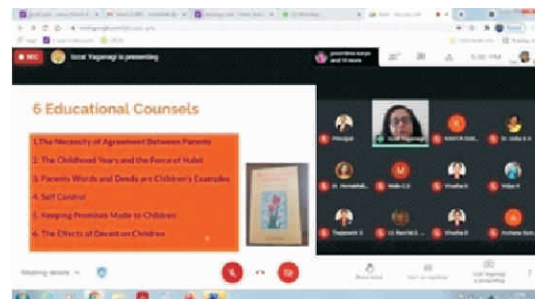
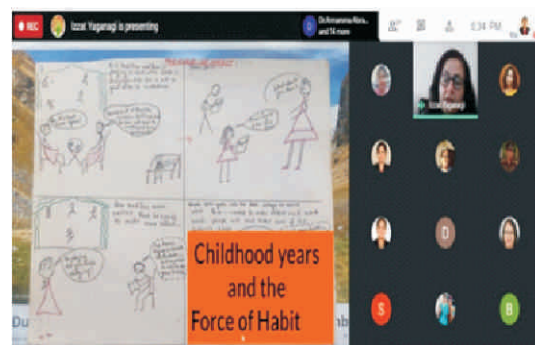
Women Empowerment Cell, BMSIT&M is organising 3 day Online Workshop on "Successful Parenting during Pandemic" on 29th May, 5th June and 12th June 2021 for three consecutive Saturdays.

The speaker of the event is Ms. Izzat Yaganagi Head of Experimental Programs Indiahikes. Madam has Specialized Training in Negotiation and Mediation, including deal mediation, Basic Skills In Counselling, Child and Adolescent Counselling, Couple and Marriage Counselling, Coaching to Excellence etc,. She has work and experience in Partner and co-founder of 'Nurturing Nature' that offers Mediation, Counselling and Training support for Educational Institutions, Corporates, Families and Individuals, and In-house Counsellor at BMSSA.

The workshop started on Saturday 29th May 2021 at 4:30PM. Dr. Usha B A women empowerment cell co-ordinator, welcomed the guest, Our beloved Principal Dr.Mohan Babu G N,Dr. Mala C S Dean student welfare, WEC members and the participants. The Speaker discussed about the parenting issues arising during this pandemic and she also highlighted on few

points on Educational councils like, Necessity of agreement between parents, Childhood years and force of habit, Parents words and Deeds are children's example, Self-control, keeping promises made to children etc.,

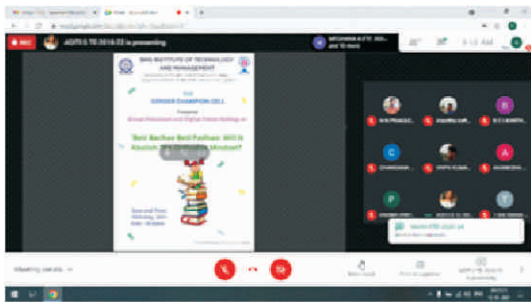
The Event will continue on 5th and 12th June 2021.



GENDER CHAMPION CELL OF BMSIT&M ACTIVITIES

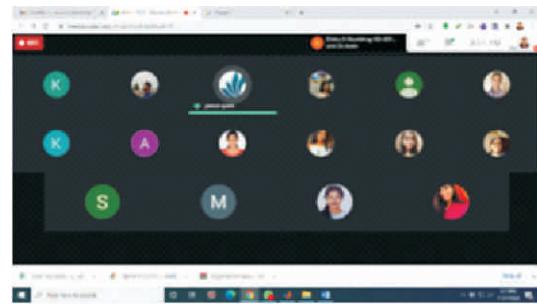
Group discussion and Digital poster making

- Group discussion & Digital poster making on “Beti Bachao Beti Padhao: Will It Abolish the Orthodox Mindset?” was conducted for first year ETE students on 15th May, 2021 from 9:00am - 10:30am. This event was organized by Prof. Thejaswini Assistant Professor. Around 28 students participated and expressed their views. The Moderators for the event were Aditi S and Ananthapadmanabha of 6th Semester, Department of ETE. The events were Judged by Prof. Saritha I G, Assistant Professor, Department of ETE.



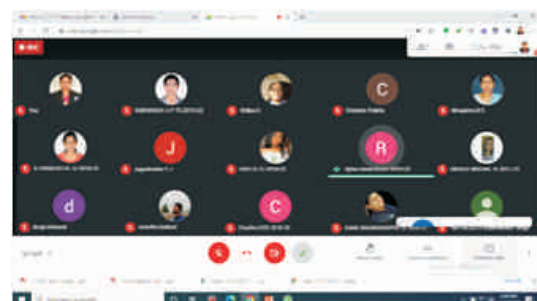
Online Webinar on “First Right Step Towards Women Entrepreneurship”

- An online webinar on “**First Right Step Towards Women Entrepreneurship**” has been conducted on 27th November 2020, from 3.00 PM to 4.00 PM. The speaker was Ms. Khushi Sharan Founder and Director of Peace Quest Education. The event, was organized in order to create awareness among students, in view of women entrepreneurship. The speaker spoke about the various ways of entrepreneurship and its scope. The Speaker told about the challenges to be faced in the society when women are working with men in different sectors of ventures. Around 45 students participated.



Group Discussion Activity:

- A Group discussion on “**He For She- Gender equality is not just a women’s issue, it is a human rights issue that benefits everyone**” On 20th November 20th, 2:00 - 3:00 pm. It was an online event and was carried out on Google meet. The purpose of the group discussion was to highlight the importance of Gender Equality and how it is a human rights issue. The event was a success with 21 registrations and the final event turnout was 10 Participants that indulged in a healthy public debate highlighting various issues and problems faced by all three genders Male, Female and Transgender.
- The Moderators for the event were, Ananthapadmanabha and Aditi S of 5th Semester, Department of ETE. The events were Judged by Prof. Thejaswini S, Assistant Professor, Department of ETE, Prof. Nirupama K, Assistant Professor, Department of MCA and Prof. Chandra Prabha R, Assistant professor Department of ECE.



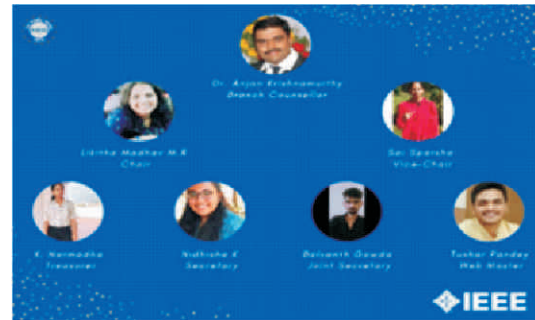
IEEE STUDENT BRANCH ACTIVITIES

Activities between Aug 2020 to Jul 2021

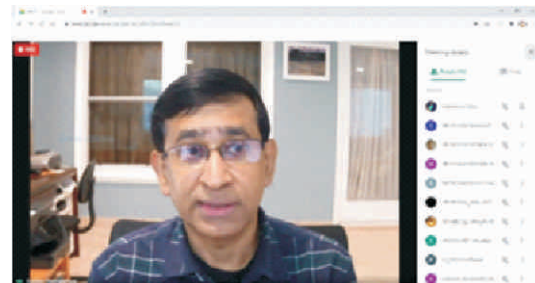
Total No. of Events during this period: 39
A jest of few important events is given below –

- **Why IEEE? - 11/08/2020** A talk “Why IEEE,” by Dr. Abhishek Appaji, was held on August 11th, 2020. The main goal of the webinar was to educate the students of BMSIT, the benefits of IEEE, and thus to promote students to make use of the membership drive to become a part of the IEEE family.
- **Culture Purpose Match - 20/08/2020** The Culture purpose event was held on 20/08/2020 to help the students and professionals figure out if their company is compatible with their ethics by careful analysis of the culture the company is based on. The talk was brilliantly delivered by Priska Burkard who has worked over 15 years in the finance industry, leading national and international IT projects for major banks.
- **AIOT for Digital Transformation - 12/09/2020** The session was addressed by Mr. Vishwas Lakkundi, Chair, IEEE CS Chapter Bangalore Section. It was a very insightful session where students were introduced to the world of AI in IoT. The speaker explained briefly the benefits of imparting AI In IoT. The webinar co-ordination group came up with a new initiative of including crossword puzzles to keep the audience engaged additionally along with the rapid-fire questions.
- **Aerial Humanoid Robotics- 01-10-2020** The webinar was conducted by Prof. Daniele Pucci, head of the Dynamic Interaction Control (DIC) lab at the Istituto Italiano di Tecnologia (IIT). DIC Lab is pioneering Aerial Humanoid Robotics, a new branch of Robotics envisioning jet-powered flying humanoid robots. The speaker gave insights about how robots are modelled at the lab and the principles behind them.

• New 2021 EXECOM, IEEE BMSIT



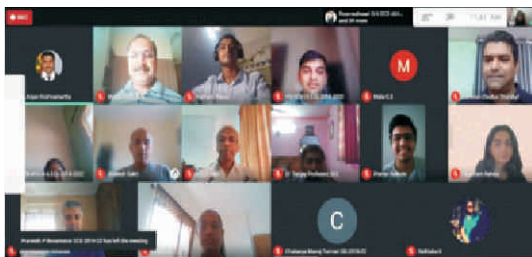
- **Roadmap To NASA- 05/12/2020** - The speaker for the Q&A session was Dr. Goutam Chattopadhyay, a Senior Scientist at NASA-JPL. The webinar started off with the speaker giving an overview of how NASA functions, and what are the innovations and current research trends in the field of Space. Following this, we had the Q&A session where the participants got their queries clarified. The answers by the speaker gave an insight into interesting topics such as black holes, life beyond earth, and how to bag a job at NASA to name a few.



- **How to master AI-ML with AWS - 19/12/2020** The event started off with an amazing introduction of the speaker Mike Chambers, AWS HERO, AWS ML Training. As a great head start the speaker gave a brief introduction about AI-ML and a walk through about the services provided by AWS. The speaker made the event quite interesting and kick started with a brief introduction to Machine Learning.
- **Digital Memory and Storage for AI at Edge – 30/04/2021** The speaker of this session was Dr. Thomas Coughlin. He is an active member of SMPTE (Journal article writer and Conference

Program Committee), SNIA (including a founder of the SNIA SSSI), he has served various important roles as Past President of IEEE-USA, Past Chair of the IEEE New Initiatives Committee, Past Chair of the IEEE Public Visibility Committee and Past Director for IEEE Region 6. The speaker also discussed some of the emerging non-volatile memory technologies (like 3D Xpoint, MRAM and RRAM and others). He also explained about the energy savings with persistent memories and projections for persistent memories.

- **IEEE SIGNAL PROCESSING SOCIETY INAUGURATION BMSIT&M – 15/05/2021** IEEE Signal Processing Society Student Chapter was inaugurated virtual on 15th May, 2021 at 10:30 am. The event was graced by Dr. Mohan Babu G.N, Principal BMSIT & M, Dr C.S Mala, Dean (Student Welfare), Dr. Anjan Krishnamurthy, Branch Counsellor IEEE Student Branch, Mr. Saneesh Sir, Branch Advisor IEEE SPS

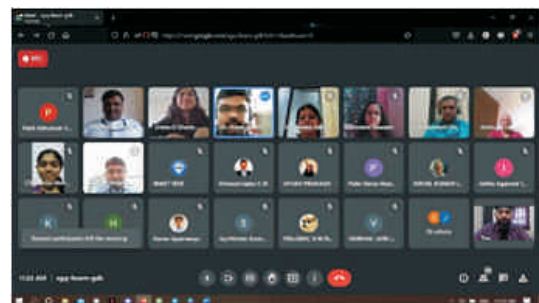


BMSIT&M, HOD's of all department and Professors of Dept of ECE, EEE and ETE.

- **CV Building Session-22/05/2021** The event was organized in order to help the students to understand the nitty-gritty for preparing a winning CV and resume. The talk started off with the speaker Ms. Susan Kathy Land giving a brief introduction about herself, then she got into the details of preparing a stand-out CV. She gave several pointers regarding what employers look for in a good CV.
- **Open Course on Cyber Security and BlockChain Technology-1st June 2021 - 5th June 2021** Cyber Security plays an important role in the field of information technology .Securing the information has become one of the biggest challenges in the present day. Whenever

we think about cyber security the first thing that comes to our mind is 'cyber crimes' which are increasing immensely day by day. Various Governments and companies are taking many measures in order to prevent these cybercrimes. Besides various measures cyber security is still a very big concern to many. Expert speakers from Industry, academia and research organizations were invited as part of this open course.

- **IEEE Information Theory Society Inauguration, BMSIT&M- 17/07/2021** IEEE Information Theory Society Chapter, BMSIT&M was virtually inaugurated on 17th July 2021 at 10:30AM. The dignitaries who addressed from BMSIT&M in the ceremony were Dr. Mohan Babu GN(Principal, BMSIT&M), Dr. C S Mala(Dean, Student Welfare), Dr. Anjan Krishnamurthy (IEEE SB Counsellor, BMSIT&M), Dr. Sheela Kathavate(HOD Incharge, Dept of ISE) and Dr. Rudresh Shirwaikar(IEEE ITS Chapter Advisor, BMSIT&M).



- **GIRL GEEKS 2.0 – 17/07/2021, 24/07/2021, 31/07/2021** The speaker for this event was Dr. Sanjay H A, Dr. Nagaraja G S and Dr. Srikanth Prabhu. He is a research pioneer in the field of cloud computing and blockchain technology. He is a B.E graduate from Kuvempu University. He did his masters in computer science and engineering from Visvesvaraya Technological University and he got his Ph.D from Indian Institute of Science (IISc). Dr. Sanjay H A is now a professor and head at Nitte Meenakshi Institute of technology.

CICC ANNUAL REPORT (2020-21)

The College Internal Complaint Committee(CICC), BMSIT&M functions as per the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013.

The Members of CICC are:

Dr. Sunanda Dixit - Chair Person, Faculty
 Mrs. Shilpa G - Faculty Member
 Mr. Rajesh N V - Faculty Member
 Mr. Vasappa - Registrar, Member
 Mrs. Komala - FDA, Member
 Mrs. Deepa Rafeeqe - (Outside Representation)
 Ms. Tejashwini Kantanavar - CSE-PG, Student Member
 Ms. Deeksha R - ISE, Student Member
 Mr. Suresh D. M. - CSE, Student Member

Provision of Counselling and Support Services:

Counselling and support services are available for the students, staff and others in need on the campus. The material informing about the same is displayed on the College Website of BMSIT&M.

Women Safety and Challenges faced by Women:

A Webinar on **Sexual Harassment at Workplace- Sensitization Session** was organised on 9th December 2020. Mrs. Aparna G.V. was the speaker and she spoke about the social scenario regarding the challenges faced by women and sexual harassment at work place, Advancing equality between women and men. The detailed Report is as below.

Webinar Report

Topic	Sexual Harassment at Workplace- Sensitization Session
Date	09-12-2020
Time	02:30 PM to 04:30 PM
Resource Person	Mrs. Aparna G V
Session	
Coordinator	Dr. Sunanda Dixit
No of Participants	180

National level webinar was organized by BMS Institute of Technology and Management in association with RVITM as a part College Internal Complaint Committee on 09/12/2020 through Virtual meet platform using google meet. The webinar convener was Dr. Sunanada Dixit, Associate Professor, Computer Science and Engineering Department, BMSIT, Bangalore and co-convener Dr. Madhura S, Assistant Professor, E&C department, RVITM. The webinar was attended by several working professionals throughout the country. There were 200+ registrations made. The webinar started with a brief introduction about the cause and importance of the session by Dr. Sunanada Dixit. Followed by which was introduction of the speaker Mrs. Aparna G V by Dr. Madhura S. Mrs. Aparna G V is a POSH specialist having 16+ years of experience in POSH expertise. She has a strong track record of creating employee friendly, safe workplaces in a broad range of industries. She spoke about various issues related to verbal and sexual harassment faced by the women at the work place.

The session was very interesting with many case studies cited as examples and there were couple of videos showcasing the problems faced by the women at work.

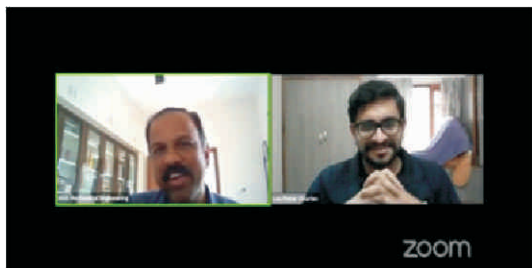
Madam also described some of the constitutional laws that were governing the rights of the women in the society to protect her modesty.



AERO CLUB

1. Aero Club Webinar

With the encouragement and support from BMSIT&M and Department of Mechanical Engineering, BMSIT&M, the Aero Club of BMSIT&M organised a webinar on 'Introduction to Drone Technology' on 18th of July at 3:30pm. Around 50 members including club members and non-club members were present for the webinar. The webinar was handled by Core Team, Aero Club BMSIT&M. The webinar started off with the core team members interacting with club members. It was then continued by explaining the different types of drones, Unmanned Ground Vehicle (UGV), Unmanned Aerial Vehicle (UAV) and the Unmanned Underwater Vehicle (UUV). Then UAVs were explained in detail on their types such as multi-rotor, fixed wing, single rotor and Fixed wing hybrid VTOL. The webinar also covered the forces of flight acting on a multi-rotor UAV, the torque effect produced by the motors and the different motions of a multi-rotor UAV and how they are executed. Down below are a few snapshots from the webinar



2. Republic day was celebrated on 26th January 2021 in the college. Drones were used to display the tricolour National flag



2. IIT-Bombay Triviajet 2.0

On the 12th of July, 2021 at 1700 hours three teams from Aero Club BMSIT&M participated in **IIT-Bombay's Trivia Jet 2.0**, a National level aviation quiz competition. Over 115 teams from all over India participated in the preliminary round of the quiz. Adityan A (1BY19EC008) and Akin Anto (1BY19EC008) secured second position in the preliminary round, Nidhi (1BY20AI032) and Mridul Sadashiv (1BY20IS090) secured the third position in the preliminary round, Jayant (1BY18ME022) and Siddharth (1BY18ME056) secured the fourth position in the preliminary round. After the preliminary round the top 6 teams were called for the final round on ZOOM the same was live streamed on YouTube. All three teams from Aero Club BMSIT&M entered the final round with full of zeal. The final round began at 1800 hours on the 12th of July, 2021. All three teams from Aero Club BMSIT&M had a good head start in the first two sub-rounds of the final round. The final round came to an end at 2200 hours on the same day. At the end, the results were announced. Nidhi (1BY20AI032) and Mridul Sadashiv (1BY20IS090) secured the first position in the competition, Adityan A (1BY19EC008) and Akin Anto (1BY19EC008) secured third position in the competition and Jayant Bhansali (1BY18ME022) and

Siddharth A (1BY18ME056) have secured the fifth position in the competition. The video of the whole event is available on YouTube.

YouTube Video Link:

<https://youtu.be/gPYkROo2wyo>

Faculty Aero club coordinator: Madhu MC

REPORT ON INTERNATIONAL CO-OPERATIVE DIVISION (ICD) ACTIVITIES

This committee is formed to facilitate the academic and hostel requirements of ICD/PIO students. To address the grievances reported by the ICD students. To take care of the passport and visa expiry and their extension procedures in coordination with the BMSCE, ICD. For the year 2020-21, total of 170 ICD students are studying in various Engineering Streams among them 32 students are new students who joined for the first year engineering courses. About 101 students out of 170 are staying in the BMSIT&M hostels (Both boys and girls). In this academic year, 6 students are from Yemen and rest of them are from Nepal and Gulf countries. The performance of the students is good and all they cleared their subjects even during this covid-19 pandemic period.

Yearly once there will be an interactive session with all the students will be held. This year it was held on 23.03.2021 from 4 pm to 5.30 pm. Nineteen first year PIO students attended this meeting and discussed the academic matter and the issues related to the PIO students. Dr. Mohan Babu G N, Principal presided the meeting and Dr. Seema Singh, Dean (ER) also addressed the ICD students. In this meeting, Dr. Daruka Prasad B, ICD coordinator showed the five minutes video clip about the Indian Tradition and Culture, Discussed the issues related to the academics, adjusting to the food practices, sports and games.

Glimpses of the meeting of ICD first year students held on 19.03.2021.



PROCTORING & COUNSELLING FOR ACADEMIC YEAR 2020-21

In order to help the students in resolving both academic and other personal/psychological issues, BMSIT&M has a centralized Proctor system based on the following objectives:

- To address the grievances of students and to enable them to perform better in their academics.
- To monitor constantly the attendance of students, academic performance, identification of slow learners and irregular students.
- To enable them to maintain good relations with teachers and other fellow beings.
- To inculcate good practices so that they can become responsible citizens of the society by organizing motivational talks on human values.

Proctor-proctee list is prepared at the Dept. level. Each Proctor is allocated 20-25 students as Proctees. A separate time slot is provided in the Time-table for conducting the proctoring meetings. In this regard, Proctor will call his Proctees and discuss about his academic shortcomings, if any and also academic difficulties. The same information will be shared with the Dept. HODs as well as the Chief Proctor. Apart from this, the Proctor will also help the students to overcome personal issues, if any. If any student needs personal counselling to overcome psychological or adjustment problems, he or she will be referred to the Professional Counsellor.

For the academic year 2020-21, proctoring was done in online mode by scheduling the Proctoring meeting using Google meet Platform on Friday afternoon. Students of all Semesters attended the online meetings with their respective Proctors during which they were enquired about the online Theory classes, online labs being conducted, preparation of Internal Tests and any other issues and the same were recorded in BIMS.

A meeting of the Proctor Committee was held on 22nd September, 2020 to discuss about the allotment of Proctors in all the Departments. A meeting of the Proctor Committee was held on 1st December, 2020 to discuss about the attendance status and other information related to proctoring. Professional Counsellor Mrs. Chethana Srinivas briefed about the need and importance of proctoring in this pandemic situation. Madam also interacted with the Proctors and stated the directions in which we need to counsel the students. A meeting of the Deputy Proctors, Department Proctor Coordinators & the Chief Proctor was conducted on 14th July, 2021 in virtual mode using Google meet link platform to discuss about proctoring issues, Counselling reports and entering of attendance and IA marks into BIMS & sending information regarding I.A. and attendance to the parents via SMS.

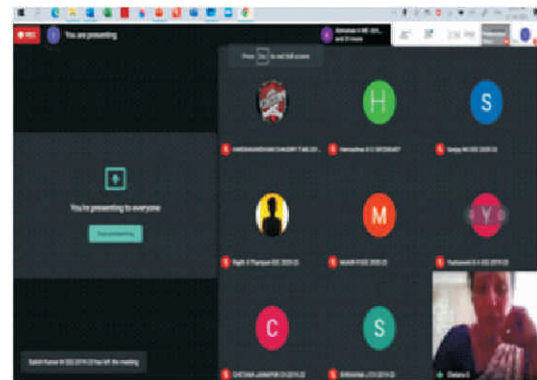
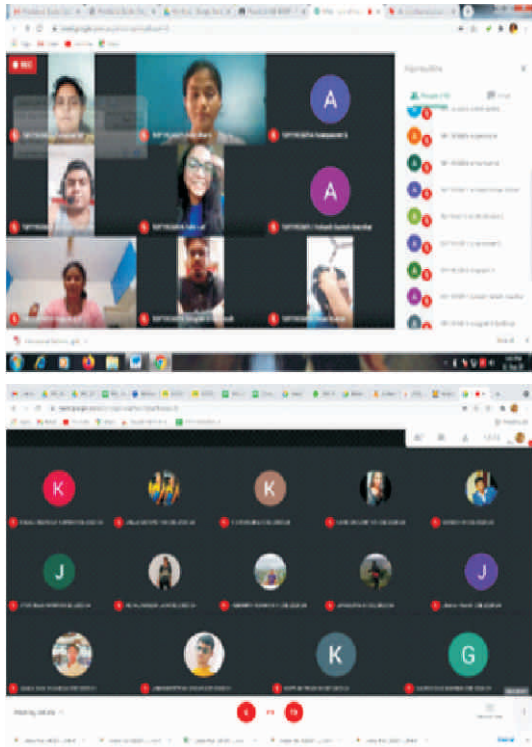
Mrs. Chethana Srinivas is the Professional Counsellor of the College. 25 students were counseled by her during the current Academic Year 2020-21. The major issues during the counselling were 'Academic deficits', 'Interpersonal' and 'Emotional issues'.

Counselling done by the counsellor has helped to overcome the physiological as well as emotional issues in case of many of the students and also in achieving good academic improvements. One student of VI Semester has scored 70% after counselling, by applying strategies of effective study skills and time management techniques. His earlier score in IV Sem was 55%.

3 webinars were conducted by the Counsellor "Effective Life management during COVID" for BMS staff and students on 27th November 2020, "Psychological well-being" was conducted for BMSIT connect group on 27th April 2021 and "Lessons for Life" was

conducted on 27th April, 2021 for IVSem EEE and IVSem lateral entry Mechanical, Information Science and Civil students.

Feedback from the students about the Proctoring and Counselling sessions were taken twice, one in Odd Semester and other in Even Semester. Around 1,100 students have given positive feedback on Proctoring/Counselling.



NATIONAL CADET CORPS

The National Cadet Corps is a **Tri-Service Voluntary Organization**, engaged in grooming the Youth of the Country into Disciplined & Patriotic citizens. It is directly Administered through Ministry of Defence, Government of India. The Defence Secretary is overall in-charge for efficient functioning of NCC.

Currently, the **World's Largest Uniformed Youth Organization**, with more than 14 Lakh Cadets on roll. The NCC aims at developing character, comradeship, discipline, a secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens. Further, it aims at creating a pool of organized, trained

and motivated youth with leadership qualities in all walks of life, who will serve the nation regardless of which career they choose.

The 39/17 NCC Company in our college is attached to **39 Karnataka Battalion NCC** of Bangalore- 'B' Grp. HQ, Karnataka & Goa Directorate. Since inception NCC BMSIT is engaged in grooming the young engineers into disciplined & patriotic citizens of the nation and motivating them to take up career in the Indian Armed Forces.

Independence Day Celebration - 2020

During the pandemic in 2020 when the colleges were closed, Independence Day celebration was allowed by the government.

The NCC company participated in the flag hoisting ceremony and gave the guard of honour.



Fit India Campaign - 2020

Ours cadets campaigned online to promote the Fit India Movement. To stay fit and healthy by displaying various stages of exercise and workouts. To encourage people to remain healthy and fit by including physical activities and sports in their daily lives.



Swachh Bharat Abhiyan - 2021

Swachh Bharat Swasth Bharat Plogging by cadets.



Annual Training Camp - 2021

Second year NCC cadets of our college successfully completed the Combined Annual training Camp held at St. Vincent Pallotti Degree College from 18th Jan to 20th Jan 2021. The camp curriculum included foot drill, rifle drill, map reading, weapon training and basics of field & battle crafts.

Third year NCC cadets completed the Combined Annual Training Camp held at Shri Rama Public School from 18th Jan to 22nd Jan 2021.



Republic Day Celebration - 2021

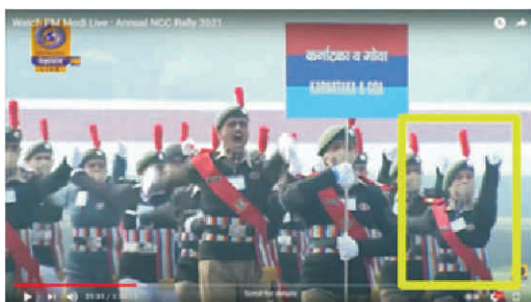
The NCC Unit celebrated the 72nd Republic Day on 26th January 2021 in full swing with magnificent display of infantry section formations & drone show raising the tricolour, apart from the marching parade and guard of honour.



Republic Day Camp / Rajpath Parade - 2021

Senior Under Officer. Deeksha Sethi of 5th Sem ECE dept. proudly marched the National Republic Day Parade at Rajpath, Delhi on 26th Jan 2021 in NCC Girls Marching Contingent. She has also represented Karnataka & Goa NCC Directorate in the All-India Best Cadet Competition at HQ DG NCC and being the runner up by securing Silver Medal in Senior Wing (Army) category.

"Jai Hind. I'm Senior Under Officer Deeksha Sethi. As an aspiring Indian Navy Pilot, my experience at the Republic Day Camp was wonderful. I seem to fall short on words to express the emotions that went into the march at Rajpath on 26th January. I am blessed with a very supportive management from BMSIT that enabled me to smoothly attend this camp and achieve to the best of my potential. Thank you so much to the Chairman and Principal of BMSIT for supporting my endeavours throughout. I'm very grateful and thankful for my Associate NCC Officer, Lt. Ranima'am for everything. It really would not have been possible without her efforts and hard work on the backend. Thank you to the faculty and staff of BMSIT for encouraging to take up every challenge courageously. A big shoutout and thank you to my NCC contingent in BMSIT for believing in me and motivating me at every step. Lastly, thank you to my family for being my backbone through my journey. I am glad to have brought back a silver medal in the All-India Best Cadet Competition - Army Wing, Senior Wing."



B & C Certificate Examination – 2021

The B-Certificate Exam was attended by 22 Second year cadets while the C-Certificate Exam was attended by 17 Third year cadets.



NCC for Statues - 2021

Statue Cleaning & Maintenance Activity at Swami Vivekananda Statue, Yelahanka Old Town, Bangalore.



Free Covid-19 Vaccination Camp in Association with BBMP:

Organised COVID-19 Vaccination Camp in Amphitheatre of the campus. Our cadets volunteered as the site-managers to maintain social distancing and guide the beneficiaries through the process of vaccination. Over 1000 people including students, faculty, staff, their families and localities were benefitted.

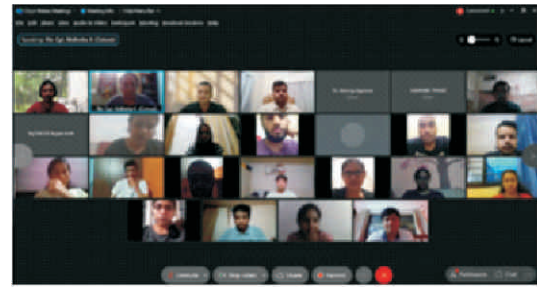


Online Awareness Quizzes on Covid-19 & its Vaccination:

NCC Cadets of BMSIT&M have been spreading awareness on the current pandemic in all possible ways to stop misinformation and false news. Launched a month-long awareness drive which gave the participants access to verified information and semi-weekly quizzes on various aspects of the pandemic. Conducted 8 quizzes with overwhelming response of about 1000 participants for each quiz.

Informative Webinars With Medical Professionals:

NCC BMSIT&M also organised three webinars with medical professional as resource person to enlighten us on various techniques and immediate response to handle uncertain situations during COVID-19 pandemic. Over 450 participants attended the webinar which received huge appreciation from attendees for the life-saving tips that was shared.



SSLC Exam Student Screening:

NCC Cadets of BMSIT&M were deployed to screen the students before entering the exam hall, at four different **SSLC Examination Centre** under the guidelines of *VTU- Youth for Seva* (Social Concern Initiative) on **19/07/2021** and **22/07/2021**.



CIVIL DEFENCE UNIT

Civil Defence is volunteer organization of people who fight to mitigate the effects of a Disaster like an Air raid, Earthquake, Floods or Civil Disturbance, on civilian life & to maintain the morale of the people in the time of crisis. Essential to augment the regular forces in war & peace. Headed by Divisional Civil Defence Warden **Lt. Rani MS**, Dept. Of Sports, BMSIT&M.

Pulse Polio Immunization Camp– 2021

Civil Defence Wardens & NCC Cadets worked with the local Primary Health Center for the National Pulse Polio Immunization Programme- 2021 by administering polio drops to children below age of five in the camp organized by Karnataka Government from 31st Jan to 3rd Feb 2021.

SSLC Exam Student Screening – 2021

Wardens of BMSIT&M were deployed to screen the students before entering the exam hall, at four different **SSLC Examination Centre** under the guidelines of *VTU- Youth for Seva* (Social Concern Initiative) on **19/07/2021** & **22/07/2021**.





Covid Testing Camp- 2020-21

NCC and Civil Defence unit have jointly organised COVID RT-PCR Test to college staff and students in association with BBMP on 13th- 17th November 2020 and 4th- 7th, 11th & 12th January 2021.



Covid-19 Warriors & Buddy Volunteer Program - 2020-21

With BBMP Covid War Room, Home Isolation Squad- Bengaluru East Zone.

Our wardens provided 24/7 Telephonic assistance and guidelines on home isolation to COVID-19 positive patients and efficient coordination with the civil authorities.

Our Civil Defence Warden, Nidhisha K, 5th sem ECE, have been felicitated by Aam Aadmi Party and also by Doctors Kitchen, for her selfless service during this COVID pandemic and has awarded as 'Proud Corona warrior of Karnataka'. On 26th Nov and 13th Dec 2020 respectively



Lt.Rani M.S, Divisional warden of BMSIT&M, has worked for the BBMP telephonic squad during the COVID pandemic and appreciated by Doctor Kitchen and Buddy Volunteer team on 13th Dec 2020



Our Civil defence wardens have Special Police officer in New year Bundo Bust Patrolling duty with Hoysala and Cheetah from 31st Dec (4pm) 2020 to 01st Jan 2021 (2am)



Organized Webinar on "Effective Life Management during post Covid-19" by Mrs.Chetana Srinivas, Professional Counselor, BMSIT on 27th of November 2020.

NATIONAL SERVICE SCHEME (NSS)

Preamble:

The National Service Scheme (NSS) is an Indian government-sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. Popularly known as NSS, the scheme launched in Gandhiji's Centenary year, 1969. Aimed at developing student's personality through community service, NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a campus-community linkage. Today, NSS has more than 3.2 million student volunteers on its roll spread over 298 Universities and 42 (+2) Senior Secondary Councils and Directorate of Vocational Education all over the country.

In BMSITM, the National Service Scheme (NSS) Unit was established in **1st September 2004**. Since its inception, various social activities successfully carried out under its banner. In the current academic year, 100 students registered which included 40 girls from all branches of our Institute.

Objectives:

The programme aims to inculcate social welfare in students, and to provide service to society without bias. NSS volunteers work to ensure that everyone who is needy gets help to enhance their standard of living and lead a life of dignity. In doing so, volunteers learn from people in villages how to lead a good life despite a scarcity of resources. It also provides help in natural and man-made disasters by providing food, clothing and first aid to the disaster victims.

Organization: Programme Officer -> Faculty Coordinator/s -> Student Coordinator/s -> Student Co-Coordinator/s -> Volunteers (Boy's and Girl's).

Events Conducted during the period June 2020 to August 2021

- Event Title: **Covid-19 Awareness Campaign,**
Place: Singanayakanahalli, Madappanahalli, Mylappanahalli, and Avalahalli
Date of Event: 29-06-2020
Volunteers Participation: 05
Brief Description: Awareness of Sanitization, Maintain social distancing and staying at home to villagers. This event conducted in association with Unnat Bharath Abhiyan. Donated Sanitizer dispenser developed by Mech-Department, BMSITM,
Beneficiaries: 04 Villages public



Figure: Sanitizer Dispenser handed over to Singanayakanahalli Gram Panchayat, developed by Mech-Department, through NSS and UBA Clubs, BMSITM



Figure: Creating Awareness of Covid-19, Sanitization, Maintain social distancing and staying at home to villagers by announcement mode by Prof. Ravindra Asundi, UBA Coordinator, in association with NSS, BMSITM

- Event Title: **International Yoga Day Celebration**
Place: Within Campus,
Date of Event: 30th June 2020
Volunteers Participation: 5
Brief Description: Mr. Ramaswamy, Patanjali Yoga Practitioner - Teaching Yoga to Participants & participants practicing yoga for betterment of their physical and mental health
Beneficiaries: 10



Figure: Yoga Presentation on International Day of Yoga Celebration



Figure: Mr. Ramaswamy, Patanjali Yoga Practitioner - Teaching Yoga to Participants

- Event Title: **Outside Interaction with oldage Home**
Place: Orphanage & Old age Home Mussange Mane, Kolar
Date of Event: 26th march, 2021
Volunteers Participation: 05
Brief Description: Student Volunteers donated stationery, clothes and essentials to Orphanage and old age home and spend a valuable time along with the kids and elderly.
Beneficiaries: Orphans and old age peoples



NSS, BMSITM Student Volunteers donated stationery, clothes and essentials to Orphanage and old age home and spend a valuable time along with the kids and elderly on 26th march, 2021

- Event Title: **"Refresh Scape" An Event to Children**
Place: Online 5 Days Event
Date of Event: 14 June to 18 June 2021
Volunteers Participation: 10
Brief Description: The demo workshops conducted for children about gardening and soil composting, clay modelling, Vedic mathematics, art and sketches, biomimicry
Beneficiaries: 25 children, 10 faculties, 5 parents are benefitted from this event

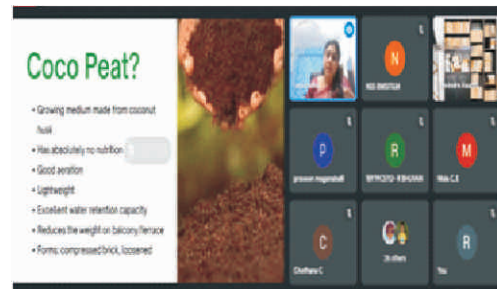
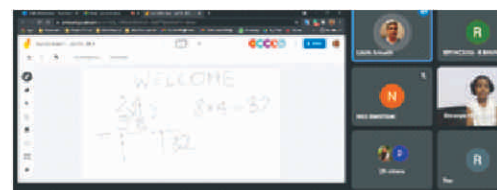


Figure: Speaker Mrs. Anuradha taught various techniques about gardening and composting in an efficient way.



Mr. Likith Srinath, Speaker of Vedic Mathematics along with children participants



Ms. Nitya Dyuthi Avadhanam, speaker of Clay model along with children participants



Mr. Sushant Gupta, Speaker of Art and Sketches along with children participants



Mr. Bhuvan R, Speaker of Bio-mimicry along with participants

- Event Title: **7th International Day of Yoga 2021**
Place: Online Webinar
Date of Event: 21-06-2021
Volunteers Participation:
Brief Description: This even conducted in view of celebration of 7th International Day of Yoga to spread the awareness of yoga practices and real yoga and their insights. The Resource Person from

Theosophical Society Practitioner, Ms. B Sandhya Rani, MA (Kannada) ML (Labour), Assistant General Manager, HUDCO, Regional Office, Bengaluru. She highlighted the yoga is nothing but union in one-self or GOD. Therefore, we need to look into our self by practicing some Asanas, Pratyahaara and Samadhi and she told about 7 petals of theosophy.

Beneficiaries: 35 participants benefitted from this event

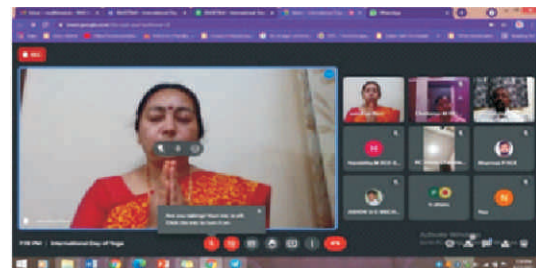


Figure: Resource person and Participants

Programme Participated by NSS Volunteer/ Programme Officer

- Attended National Webinar by NSS Program Officer, Online Mode, Sri Siddhartha First Grade College, NSS Unit, Tumkur, on 13-08-2020, History and signification of National Flag

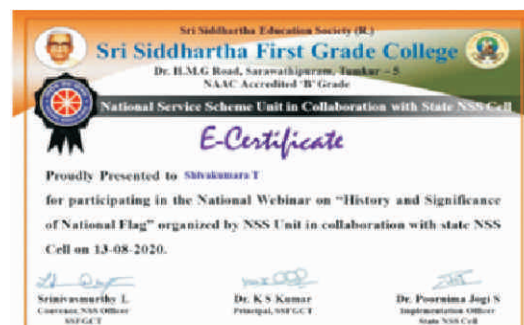


Figure: National Webinar on Importance of National Flag

- Attended International webinar by NSS Program Officer, Online Mode, Dr. A V Baliga College of Arts & Science, NSS and NCC, Kumta, Dharwad, on 16-08-2020, Life Skill Enhancement through NSS and NCC



Figure: International Webinar on Life skill enhancement through NSS and NCC

- Attended National webinar by NSS Program Officer, Online Mode, Campus 2 Community and NSS, KCESS, on 18-09-2020, NEP:2020: Transformation School Education



Figure NEP:2020: Transformation School Education webinar

- Attended Webinar by NSS Student Volunteer, CSE dept., Online Mode, Do It Yourself, State NSS & Dept. of Youth Empowerment and sports Cell, GoK, on 07/11/2020, Do It Yourself – Animal Husbandry and Dairying.



Figure: Webinar on "Do It yourself" (Youth & Women Empowerment through Gomaya Products in association with Rashtriya Kamadhenu Aayog)

SC/ST CELL

Prabuddha overseas scheme



A talk on Prabuddha overseas scheme for higher education in foreign universities was conducted on 22nd December 2020 at 2.00pm.

The SC/ST Cell of B M S I T & M, has

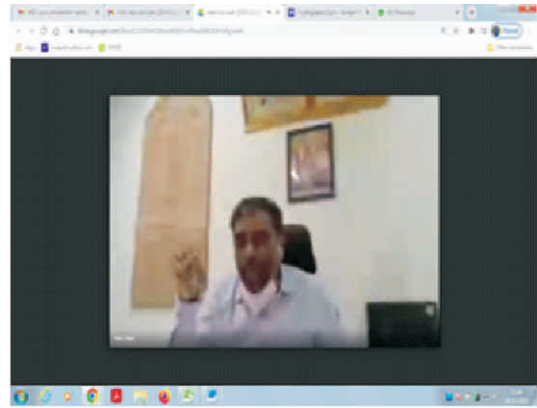
arranged an invited talk on "Prabuddha Overseas Scholarship scheme" for UG students belonging to SC/ST category of BMSIT&M on 22nd December 2020 at 2.00pm.

This program was arranged to create awareness about schemes related to overseas scholarships available for SC/ST students. Around 40 students of different branches participated in the online webinar conducted using Google Meet platform with the link: <https://meet.google.com/nep-czcs-peh>.

The program began with welcoming the Resource person Mr. Mahesh, Chief

Administrative Officer, Pre Examination Training Centre, Bengaluru by Prof. Lakshmisagar H S, Asst. Professor, Dept. of ECE and Head of SCST cell, BMSITM.

Mr. Mahesh explained all the facilities available for Karnataka students to pursue higher education abroad. Depending on parent's income, Social welfare office of Karnataka government will provide financial assistance (Visa charges, University fee, Insurance charges, TA/DA). This scheme is provided if the students get admitted in top 200 universities mentioned in the website (<https://sw.kar.nic.in/foreignstudies/>) and also scores good marks in the examinations. He also answered all the queries asked during the talk.



Mr. Mahesh during the talk

The table below shows the criteria of eligibility for the scheme.

Sl. No.	Annual Income Limit	Eligible for Financial Assistance
1	Up to Rs. 8.00 lakhs	100%
2	Rs. 8.00 to Rs.15.00 lakhs	50%
3	Rs.15.00 to Rs.25.00 lakhs	33%

COMPUTER SOCIETY OF INDIA

Institutional membership number: 102129
Chapter Name, Region
Bangalore Chapter, V

CSI Student activity "Ecode words" was conducted on 23.2.2021 at 3:30. Around 19 students participated in the event. CSI Student Coordinator Mr. Pratham from 1st year B Section arranged a few technical activities like A talk on Computers, decode the words and a brief introduction to CSI was given to the students. The students who actively participated in the game called ecode words were given prizes (1st, 2nd and 3rd) from the CSI club. Dr. Arunakumari B.N and Dr. Lakshmi B.N distributed the prizes.

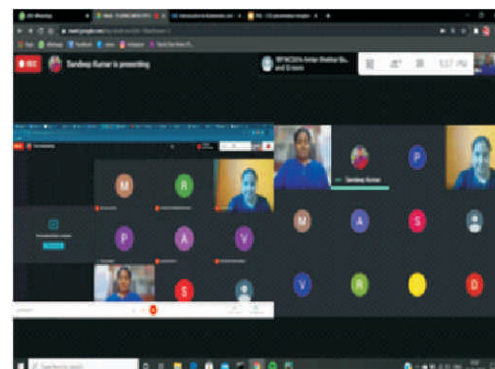


Participation of Students in the CSI Club Activity

CSI Student “Membership Drive” was conducted on 22.4.2021 at 3: pm. Around 100 students participated in the event. CSI a professional body membership was presented to the students during Induction program. Gave brief information about the benefits of CSI and the activities organized in BMSIT&M. Motivated the students to register under CSI. Prerana 5th sem and Roobini 5th sem CSE briefed out about the activities organized during this Pandemic. The Fee structure was informed to the students. Informed the students to join CSI so that more and more activities can be organized in association with CSI and the students can interact with the students of various colleges. Around 100 students participated in the event.



CSI Student activity “Playing with Python Codes” was conducted on 27.10.2021 from 5-6 pm. Around 26 students participated in the event. A hands-on workshop was organized. The workshop sessions were conducted by Sandeep Kumar student of BMSIT&M



e-Yantra Robotics Lab (eLSI)

What is e-Yantra?

e-Yantra, a robotics outreach project hosted at IIT Bombay and funded under NMEICT* by the Ministry of Education, Government of India. e-Yantra initiatives complement the largely exam oriented Higher Education systems in India by “Project-Based Learning (PBL)” capabilities to render young engineers able to address real problems in society. e-Yantra encourages a “can do” attitude amongst students, that prepares them for a career in research or as technology entrepreneurs. Students are encouraged to use robots to solve “real-life problems.

e-Yantra Lab Setup Initiative (eLSI):

The project is where practical engineering skills get honed. Most good postgraduate engineering schools often quiz entrants about their technical competence, by discussing their BE project experience. e-Yantra naturally lends itself to motivating exciting BE projects where students can learn a lot through 'Project-Based Learning' with the robots. eLSI fills the gap in facilitating good BE projects, by setting up Robotics labs at colleges and training teachers.

Inauguration of eLSI:

e-Yantra lab inauguration (eLSI) in collaboration with IIT Bomaby was

conducted in BMSITM on 27th November 2020. Inauguration began with ribbon cutting which marked the official opening of the newly established lab by the chairman of BMS Institute of Technology and Management, Mr. M Madan Gopal, IAS (Retd.), along with Principal, Dr Mohan Babu G N.



Achievements and awards:

1.E-Yantra Ideas Competition year 2020:
A team of 4th year students from BMSIT took part in the E-yantra ideas competition. The team consisted of: Kaushik Balasundar – Team Leader (ME), Abay J Kottoor (ME), Akash S Nambiar (ME),

Shwetha D (CSE) Under the guidance of Mrs S.Nithyapoornima, Assistant Professor. The project they presented was titled – “Hydraulically Actuated Autonomous Nurse (HYAAN)”. They worked on developing a full-scale model of the project. The aim of the project was to help hospital nurses lift and turn sedated and unconscious patients amid the increasing shortage in skilled nursing staff across the world. The full-scale prototype was completed by January and they submitted a video for evaluation which was shortlisted for the Regional Finale that took place at PSG Institute of Technology and Applied Research, Coimbatore, where their efforts were highly appreciated by the judging panel. Their project was then selected for the National Finale, conducted by IIT Bombay, and was commended by the judging panel of acclaimed IIT Bombay professors and Angel Investors. Their project finished in the top 5% of the competition.

SPORTS ACHIEVEMENTS FOR THE YEAR 2020-21

Team Achievements:



Staff Volleyball (M) Team Secured First Place in the BMSCE Tournament in Feb 2021

Conducted Fitness Tests During College Team Selection Trials from 1st March 2021



Flexibility (for back) and Vertical Jump (Leg Strength)



Agility test for Men (10 mts x 6 Shuttle Run)



Pushups for Arm Strength



Crunches for abs Strength



Endurance Test for Women (6 min run)



Cricket team selection trials with skill test:



Our college Basketball (M) team had Practice match with Reva University team twice



One of our college basketball player Mr Dheeraj Reddy of EEE is playing for Central Excise and Customs team as a guest player, his performance in the State Senior A Division tournament was extremely good.

Inauguration of Badminton indoor hall



Inauguration of Badminton court



It is an International Standard Maple Wooden Flooring Badminton Court, it's a professional sports facility where wearing of non-marking shoes is compulsory to enter in to the arena.



Facilities available are – Roof lighting, Dressing room, Swedish ladder on the wall, Jumping board, Battle rope, TRX belt etc... for conditioning of players. Provision of non-marking shoes on demand for pay and use bases.

A BRIEF WRITE-UP ABOUT MARGADARSHAN INITIATIVE

AICTE has invited the project proposals during May - 2021 from well-established engineering colleges to handhold and mentor other ten engineering colleges towards academic excellence which in turn leads to accreditation under the Margadarshan Initiative. Based on the initial screening, BMSIT&M has been shortlisted and invited to make presentation before expert committee.

As per the scheme, according to Ministry of Education, Government of India, a well-established AICTE approved Institute shall be nominated as Margadarshan Institute or Mentor Institute by AICTE for continued excellence in imparting technical education in the country. With this, the Mentor Institute with its human resources(experts) shall train the faculty members of other colleges in the domain of modern engineering education.

BMSIT&M has proposed government and rural engineering colleges to extend its support in building the eco-system which leads to constructive outcomes in engineering education. It is an opportunity for BMSIT&M to contribute towards betterment of rural and government colleges which are providing an education for the rural students, more specifically for rural girls who are unable bear the expenses of engineering education in private colleges at cities. As per the scheme, AICTE will support Mentor Institute (BMSIT&M) by grant-in-aid of Rs. Five lacs per Institute for conducting the activities which leading to academic excellence. With this BMSIT&M is intended to make its efforts towards sustenance of rural and government colleges.

Presently, the following are the beneficiary institutes for the duration (2021-2023) :

Sl. No.	Institute / University	Address
1	Government SKSJT Institute	K.R. Circle, Bangalore
2	Government Engineering College	Ramanagaram
3	School of Engineering, Reva University	Kattigenahalli, Bangalore
4	Government Engineering College, Hassan	Approval Awaited

Chief Coordinator of Margdarshan Initiative @BMSIT&M :
 Dr. Thippeswamy G
 Professor
 Department of Computer Science & Engineering

Placement and Training Cell

The placement season for the 2021 Batch commenced on 4th August 2020.As on 29.07.2021

Highlights 2021 Batch
119 companies visited for recruitment as on date (2021 batch placements still in progress)
581Pre-placement offers so far
Highest CTC offers by: Nutanix – 40.50 LPA, Cloudera – 26.50 LPA, ADOBE – 22.00 LPA, WALMART – 20.60 LPA, SAP LABS – 20.60 LPA, AMAZON - Rs.19.00 LPA, ENDURANCE INTL GROUP – 15.00 LPA, GAINSIGHT – 13.00 LPA, MONEYVIEW – 12.21 LPA, PHARMEASY – 11.00 LPA, ANZ – 11.00 LPA, KHOROS – 10.50 LPA etc.
Highest number of offers made by ANZ, COGNIZANT, PRICEWATERHOUSE COOPERS, WIPRO, CAPGEMINI, TCS etc.
Top recruiters like SAP LABS, INFORMATICA, AMAZON, ENDURANCE, SIEMENS, COGNIZANT, CAPGEMINI, ROBERT BOSCH, NOKIA, ATKINS regularly visit campus.
New recruiters like WALMART, ONE ADVANCED, THE MATH COMPANY, EPSILON, KHOROS, LUMEN, etc. visited BMSIT&M for 2021 batch.

Placement – Job Offer Details as on 29th July 2021

COMPANY	TOTAL NO. OF JOB OFFERS	CTC-LPA (Rs.)
ABM	1	3,60,000
ADOBE	1	22,00,000
ALTEMETRIK	3	4,75,000
ALTRAN	12	3,80,000
AMAZON	5	11,00,000
AMAZON(Non IT)	1	4,50,000
ANZ	5	8,60,000
ANZ	1	8,60,000
ANZ-2	20	11,00,000
ANZ-2	4	8,50,000
AVAALI SOLUTIONS	2	3,00,000
BOTTOMLINE TECHNOLOGIES	1	9,00,000
CAPGEMINI	10	6,80,000
CAPGEMINI	94	3,80,000
CLOUDERA	2	26,50,084

CLOUDERA - INTERNSHIP	1	45,000 p.m
COGNIZANT	73	4,01,986
COMMSCOPE	1	8,00,000
COREFLEX	2	3,00,000
CRMIT	1	5,00,000
CSGI	2	5,50,000
DELL TECHNOLOGIES	2	6,87,103
DELOITTE	6	2,50,000
DOVER INDIA	4	6,50,000
ENDURANCE INTERNATIONAL	3	15,00,000
EPICOR - INTERNSHIP	8	25,000 p.m
EPSILON	10	5,00,000
EVERTZ	4	3,36,000
EVOSYS	1	3,20,000
GAIN SIGHT	3	13,00,000
HCL / SANKALP SEMICONDUCTORS	10	3,50,000
HEXAWARE TECHNOLOGIES	5	5,00,000
HPE	1	4,05,000
HUMAN FRACTAL	1	4,00,000
INFINITY SOLUTIONS	1	3,50,000
INFOGAIN	3	3,75,000
INFOGAIN	7	3,75,000
INFORMATICA	1	6,79,683
INFORMATICA - INTERNSHIP	1	25,000 p.m
INFOSYS HACKWITHINFY-Contest	2	8,00,000
INTELLIPAAT	2	5,54,000
iOPEX(CoCubes)	3	3,00,000
K12 TECHNO SERVICES	1	3,22,500
KANSASSTEK LLC - OFFCAMPUS	1	7,99,992
KHOROS	4	10,53,000
KPMG	1	5,00,000
LUMIN	1	5,00,000
MICROFOCUS	1	3,00,000
MINDTREE(IMTS)	10	2,97,000
MONEYVIEW	9	13,21,600

MOOLYA SOFTWARE	10	3,00,000
MPHISIS	11	4,00,000
NOKIA - Content Writing - INTERNSHIP	1	25,000 p.m
NOKIA - INTERNSHIP	6	25,000 p.m
ONE ADVANCED	4	6,00,000
ORACLE - OFSS	8	6,55,781
ORACLE(OMC)	6	5,81,766
ORACLE(OMC)	2	5,81,766
PATH PARTNER	2	6,00,000
PEOPLESTRONG	5	3,60,000
PHARMEASY	1	11,00,000
PWC AC	16	7,00,000
PWC AC - 2	6	6,00,000
PWC AC - 2	7	6,00,000
PWC-KOLKATA	9	4,84,615/5,11,615
RAKUTEN	2	8,00,000
ROBERT BOSCH	12	5,00,000
SAP LABS	11	14,10,000
SAP LABS - INTERNSHIP	2	25,000 p.m
SIEMENS HEALTHINEERS	5	5,50,000
SIEMENS TECHNOLOGY	2	5,00,000
SONICWALL - INTERNSHIP	5	15,000 p.m
SPIRENT(MTECH CS) - INTERNSHIP	1	25,000 p.m
TCS NINJA - Contest	4	3,36,000
TCS NQT NINJA	12	3,36,000
TEMENOS	2	6,16,127
TEXAS INSTRUMENTS - INTERNSHIP	1	45,000 p.m
THE MATH COMPANY-Contest and Campus	8	4,00,000
TRIJIT TECHNOLOGIES	2	2,04,000
UNSCHOOL LEARNING	4	3,00,000
WALMART GLOBAL TECH	1	20,67,400
WIPRO	65	3,50,000
TOTAL OFFERS	581	

PLACEMENT & TRAINING ACTIVITIES

Students' Training:

Placement training on Aptitude and soft Skills imparted to all the pre-final year UG & OG students during the months of April, May & July 2021, to enhance their learning and prepare them better for their upcoming placement season from August 2021. Employability assessment tests was conducted for these students by First Naukri and Geek for Geeks to assess the readiness of the students and make them more industry ready.

Internships

The B.E, M.Tech and MCA students of the 2021 batch, were offered Internships by top companies such as, Endurance, Amazon, Epicor, Cognizant, Wipro, Siemens, Informatica, etc. Around **754 students have pursued their internships from 345 distinct companies and 323 students are being given stipends ranging between Rs. 5,000 p.m. to Rs. 50,000 p.m.**

Industry Engagements

Cognizant ServiceNow Mou: BMSIT&M and Service Now, an American software company based in Santa Clara, California that develops a cloud computing platform to help companies manage digital workflows for enterprise operations, signed an MoU on 8th September 2020. Cognizant, a Day 1 recruiter has come forward to offer the Service Now training for the Cognizant selected students of the 2021 batch along with free certification. On successful completion of the Service Now certification exam the students will be offered a Gold pre-placement offer at Cognizant.

Capgemini Adapt (pre-joining Program):

The leadership team of Capgemini conducted a pre-joining – ADAPT (Accelerated Digital Aid for Pre-onboarding Talent) program, a comprehensive suite of self-paced learning modules blended with adequate hands-on practice for the Capgemini placed students of the 2021

batch on 21st December 2020.

Epsilon Campus Engagement: Epsilon, a silver tier recruiter at BMSIT&M, held an interactive campus engagement session with the placement team on 11th Feb 2021. The aim of the session was to understand the best practices followed on campus to encourage students to participate in campus recruitments and also to see how best the company could engage with BMSIT&M campus beyond campus recruitment.

Interaction With Bmsce Placement Team:

An interaction was held with the placement team, Dr. Pradeepa, TPO and Dr. Sharanabasava, Asst. TPO of BMSCE and Dr. P Ganesh, TPO and Ms. Ambika Subhash, Dy. TPO on 18th March '21 at BMSCE campus. The main aim of the interaction was to enhance the placement opportunities for BMSIT&M students through alumni engagement from both campus for greater industry connect and the best practices followed at the PT Cell, BMSCE to further improve placements.

BMSIT Connect: The BMSIT Connect project aimed at empowering the student community with the right knowledge and skillset to succeed in the ever-changing world of technology conducted a CV and Resume building session on 22nd April '21 for all the pre-final year students of the 2022 batch. The session was conducted by Alumni and Industry experts working at Tesla, HPE, DigitalNorway etc., who informed the students about industry expectations when they appeared for their placement interviews during their final years. The present 2021 batch final year placed students also shared their inputs with their immediate juniors to help them face their upcoming placement season during August 2021.

Employers' Meet 2021: The 7th edition of the Employers' Meet with the theme 'Future of Work' was conducted for the IT

and Circuit branch students on 19th June 2021 and about 500 students were part of the events. The IT event had panelists from companies such as Google, Netflix, Dun&Bradstreet, Epsilon, Accenture and Capgemini who interacted with students and helped them understand how they have to upskill themselves in the present industrial scenario, while the Circuit event had panelists from companies such as Cognizant, ARM, Amazon, Alteos and Infineon Tech who also gave the students various insights in the core circuit field of engineering. The panel was a combination of senior industry practitioners and HR managers.

Cognizant Softskills Session: A placement preparedness and softskills session was conducted by Ms. Mary, Associate Manager, Training, for all the pre-final year students on 3rd June'21. The session focused on informing students about the importance of softskills while facing interviews and how to avoid making mistakes with their mannerisms during their interview process. The session also covered the importance of building good resumes and self-grooming.

Cognizant Cyber Security Session: A session on Cyber Security, a niche skill in the industry these days was conducted for the IT students of the 6th semester by Mr. Prashant Dahalkar, Director, AI&Analytics on 7th June'21. The session helped students understand the importance of Cyber Security and how best they could go about upskilling themselves on the said technology if they were interested to pursue a career in that field.

COGNIZANT LEADER CONNECT SESSION: Mr. Gopalakrishna Bylahalli, VP Delivery, CDE Digital Architecture held a connect session with the pre-final students on 9th June'21 to help them understand the field of Business Technology Services, which comprises of Cloud Computing, Intelligent Process Automation, IOT & Cognitive Computing. In addition, a leader connect session was held with Mr. Munish Gupta, Sr. Architect, on 29th June'21. The session covered topics involving multiple conventional abases with a strong focus around evolving data strategy around Bigdata and Cloud initiatives.

Employers' Meet 2021: The 7th edition of the Employers' Meet with the theme 'Future of Work' was conducted for the Civil and Mechanical Engineering students on 22nd May 2021. The Civil event had panelists from companies such as Embassy Group, L&T Construction, CMTI, JMC projects and Ajmal Estates who interacted with students and helped them understand how they have to upskill themselves in the present industrial scenario, while the Mechanical event had panelists from companies such as Timken India, Ringfeder Power, ZF Wind Power, Robert Bosch, CISCO and TESLA who also gave the students various insights in the field of Mechanical Engineering.



Courses offered in BMSIT&M

UNDERGRADUATE PROGRAMMES

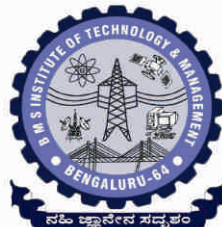
1. B.E. in Electronics and Communication Engineering
2. B.E. in Computer Science and Engineering
3. B.E. in Information Science and Engineering
4. B.E. in Mechanical Engineering
5. B.E. in Electrical and Electronics Engineering
6. B.E. in Electronics and Telecommunication Engineering
7. B.E. in Civil Engineering
8. B.E. in Artificial Intelligence and Machine Learning

POSTGRADUATE PROGRAMMES

1. Masters of Computer Applications (MCA)
2. M.Tech in Machine Design
3. M.Tech in Computer Science and Engineering.

RESEARCH PROGRAMMES

1. M.Sc.(Engg.) By Research
2. Doctor of Philosophy (Ph. D)



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