

ಬಿ.ಎಂ.ಎಸ್. ತಾಂತ್ರಿಕ ಮತ್ತು ವ್ಯವಸ್ಥಾಪನಾ ಮಹಾವಿದ್ಯಾಲಯ
(ವಿ.ಟಿ.ಯು. ಅಡಿಯಲ್ಲಿನ ಸ್ವಾಯತ್ತ ಸಂಸ್ಥೆ)

BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT
(Autonomous Under VTU)

**DEPARTMENT OF
ELECTRONICS AND COMMUNICATION**

WAVES

VOLUME 09 | ISSUE 01

AUGUST 2022 - JANUARY 2023

DEPARTMENT VISION

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

DEPARTMENT MISSION

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

PROGRAMME EDUCATIONAL OBJECTIVES

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

MESSAGE FROM HEAD OF DEPARTMENT



The Department of Electronics and Communication Engineering is showing consistent improvement in its academic, research, and placement performance. It offers a range of innovatively designed programs like open courses and value-added courses whose curricula are constantly updated to meet the changing requirements of the industry and to meet the needs of major stakeholders. We believe that our students have been well accepted in their job profiles and have consistently exceeded the expectations of the corporate world. The Department of Electronics and Communication Engineering brings out its bi-annual newsletter “WAVES” every semester. The Department is releasing its Volume-9, Issue-1, covering faculty and students’ achievements from August 2022 to January 2023. I hope this will give motivation and encouragement for both students and faculty to excel further in their respective fields. I also congratulate the editor team members for their efforts, hard work, and precise coverage of the information. I wish them all the best.

Happy reading!

Dr. Jayadeva G. S. Professor & Head
Department of ECE, BMSIT&M

FACULTY AS RESOURCE PERSON

- Dr. Saneesh C. T. gave a talk on "Vector Spaces and Dimensions of four subspaces" on 18.10.22 as a resource person for the FDP on "Fundamentals and Applications of Basic Signal Processing" conducted by the department of ECE, SJCIT, Chikkaballapur

REVIEWER FOR JOURNAL / CONFERENCE

- Dr. Anitha V.R, Associate Professor, Department of Electronics and Communication Engineering is a Technical Review Committee Member for the 2nd IEEE International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME) from 16.11.2022 to 18.11.2022.
- Dr. Jayadeva G.S. has been accepted as a reviewer for the journal "WSEAS TRANSACTIONS ON ELECTRONICS(WSEAS)"

INTERNATIONAL CONFERENCE

- Anitha V.R "Performance Analysis of 6x6 CNT Field Effect Transistor Array Model for Biomedical Applications". International Conference on Composite Science and Technology (COMSAT 2022), Johor, Malaysia, August 22 & 23, 2022.
- Anitha V.R. "Design and Development of Light Weight Fractal Tree Antenna Structure". International Conference on Composite Science and Technology (COMSAT 2022), Johor, Malaysia, August 22 & 23, 2022.

MEMORABLE MOMENTS / BEST PRACTICES

The second meeting of the Board of Studies (BOS) of Circuit branches (Electronics and Communication Engineering, Electronics and Telecommunication Engineering, Electrical and Electronics Engineering) was conducted on 20.08.2022 from 10.00 am in the Second Floor Seminar Hall of Academic Block to finalize the scheme and syllabus of 2nd year autonomous courses.

Following were the important members present during the meeting.

01	Dr. Jayadeva G. S	Chairperson
02	Dr. Raju Hajare	HoD, ETE Department Member
03	Dr. Ramarao	HoD, EEE Department Member
04	Dr. K. Vishwanath	Professor, Department of ETE, SIT, Tumkur External Member
05	Mr. Vinayaka Babu	MD, 4Semiconductors, Bengaluru External Member
06	Mr. Reynold Edward	Associate Director, Samsung India External Member
07	Mr. Srikanth	Mercedes Benz, Bengaluru External Member

The external members of the committee gave various inputs and suggestions to improve the curriculum, including preparing the students for a competitive environment and facing real-world problems.



ECE_AUG_FIG1



ECE_AUG_FIG2

- Parent-teacher meeting was conducted on 3rd December 2022 at 10.30 am in the 2nd-floor seminar hall for the parents of 5th-semester students. One parent by the name of A C Mahendran who works in the Kannada film industry as a cinematographer attended the meeting. Enquired about placement activities and the support for higher education from the institute. The head of the department clarified the doubts.



- 2. A parent-teacher meeting was conducted for the parents of 3rd-semester students in the 2nd floor seminar hall on 10th December 2022 at 10:30 a.m. Around 25 parents attended the meeting. They enquired about the academics, marks cards of previous semesters, and placement activities of the institution. All these points were answered satisfactorily by HoD and the faculty charge. Also, they were given information about the AICTE activity points that their wards have to make during the course and the various activities conducted by the institution in this regard.



- A parent-teacher meeting was conducted for the parents of 1st-semester students in the 2nd-floor seminar hall on 21st January 2023 at 10.30 a.m. Around 30 parents attended the meeting. The head of the department Dr. Jayadeva G.S. welcomed the parents and presented the department profile. It was followed by an autonomous scheme and evaluation procedure presentation by Dr. Surekha R. Gondkar. Some of the doubts related to the academics, evaluation process for the autonomous scheme, and placement activities of the institution were answered satisfactorily by HoD and the faculty in-charges. Also, they were given information about the AICTE activity points that their wards have to make during the course and the various activities conducted by the institution in this regard.



- Prof. Jagannatha K B completed his Ph.D. viva voce on 25.01.2023 under the guidance of Dr. Chandasree Das from the Department of Electrical and Electronics Engineering BMSCE, Bengaluru.

FDP WORKSHOPS ATTENDED BY FACULTY

- Mr. Shivarudraiah B, Assistant Professor, Department of Electronics and Communication Engineering attended a one-week national level FDP (online) on Amazon Web Services from 22.08.2022 to 27.08.2022 organized by the department of CSE, M. Kumarasamy College of Engineering in association with AICTE.
- Dr. Ambika R, attended a 5 days National Level Faculty Development Program on “Application of Geoinformatics and Remote Sensing in Engineering and Technology” from 19/09/2022 to 23/09/2022 at Bharat-Ratna Indira Gandhi College of Engineering, Kegaon, Solapur, Maharashtra
- Mr. Shivarudraiah B, Assistant Professor, Department of Electronics and Communication Engineering attended a national level FDP (online) on Real Time Systems (from 01.07.2022 to 31.10.2022 course duration) organized by NPTEL-AICTE.

DEPARTMENT PROJECT PRESENTATIONS

- Project presentations phase 1 were held during 27.10.2022 to 28.10.2022 for 7th semester students.
- Project presentations phase 2 were held during 24.11.2022 to 25.11.2022 for 7th semester students.

STUDENT INTERNSHIP

- No. of final-year students undergoing an industry internship in October - 21

FDP CONDUCTED BY FACULTY

One Week International Faculty Development Program on “5G Challenges – An Antenna Design Perspective” was conducted from 26.09.22 to 30.09.22. The faculty development program (FDP) was devoted to the fundamental theory, recent developments, and research outcomes addressing the related theoretical and practical aspects in the usage of advanced tools and techniques for the Design of Practical RF antennas.

Day1

The day started with the inauguration by Dr.Balamati Choudhury, Chief Guest, Dr. Mohan Babu G N, Principal, BMSIT&M, Dr. Jayadeva G S, Head, Department of ECE, BMSIT&M, Dr. Anitha V R, Convener of the program, Department of ECE, BMSIT&M were grace the occasion on 26th September 2022 at 10:00 AM.



Lightening the Lamp by Delegates

Dr.Balamati Choudhury, Scientist – SF, Centre for Electromagnetics (CEM), CSIR-National Aerospace Laboratories (CSIR-NAL), Bengaluru discussed the fundamentals of 5G Challenges, Antenna parameters which are useful to analyze the designed antennas after fabrication. The speakeron elaborated on the antenna designs for various applications like Aircraft, Radar, Defence, and Wireless.

Dr.S Raghavan, Professor (H.A.G.) Retd., Electronics and Communication Engineering Department, N I T Trichy, elaborated on the planar transmission lines and 5G of antennas after Inauguration.

Dr.S Raghavan, Professor (H.A.G.) Retd., Electronics and Communication Engineering Department, N I T Trichy.



Day 2

Dr.Tathababu Addepalli, Associate Professor, Aditya Engineering College, Kakinada, provided Hands-on training on High-Frequency Simulation Software (HFSS) by taking different types of antennas like Patch Antenna with probe feeding on 27th September 2022, Morning Session and Dipole & Horn Antennas in the Afternoon Session.

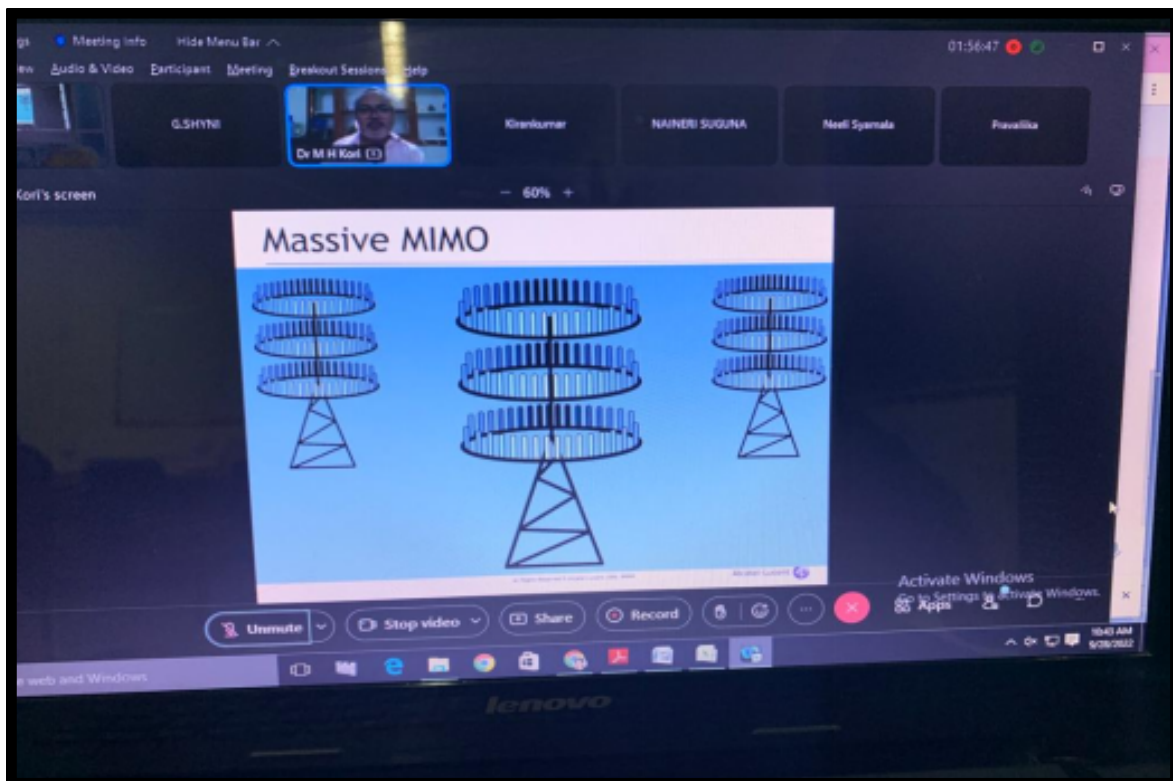
Dr.Tathababu Addepalli, Associate Professor, Aditya Engineering College, Kakinada



Day.3

Dr. M.H. Kori, IETE Vice President, Technology Advisor, SAGE USA, explained the importance of Advanced Antenna Technologies for 5G Advanced & Beyond and how these antennas have more advantages when compared with other types of antennas. Discussed about MIMO techniques for different generations and how they excite the antenna on 28th September 2022, Forenoon. The speech also stressed on UHF antennas for broadband applications and emphasized dual and circularly polarized antennas.

Dr.T.Shanmuganantham, Professor, Pondicherry University described the Design Challenges and Issues of 5G Antennas on the 28th September 2022 afternoon session.



Day_4

The participants were taken on an Industrial visit to BSNL, Bangalore where they explored the practical implementation of 5G in wireless & and mobile applications and what is the role of antennas in BSNL.

BSNL, Bangalore



Day_5

Dr. Ang Yu, Carolina University, USA delivered a lecture on Antenna and RF systems; and some design examples for 5G applications on 30th September 2022 during the morning session.



Dr. Ang Yu, Carolina University, USA

Valedictory was organized immediately after the session which was graced by Dr.Ambika R, Professor, Department of ECE, Dr. Anitha V R, convener for the program, Department of ECE, BMSIT&M. Finally the program was concluded with thanks and National Anthem. The participants of the program gained exposure to new areas of research and development being carried out in universities across the globe. It also enhances the research competence of faculty in the areas of RF antennas for 5G challenges by providing exposure to practical problems and solutions.



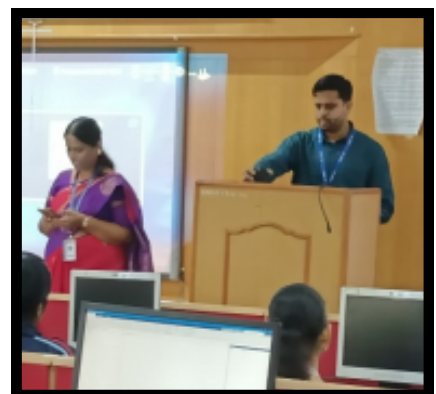
Valedictory of the Program Graced By Dignitaries

ONLINE COURSES BY FACULTY

- Mr. Shivarudraiah B, Assistant Professor, Department of Electronics and Communication Engineering completed an online course on Real-Time Systems of 12-week duration from 01.07.2022 to 31.10.2022 organized by NPTEL-AICTE.

STUDENTS WORKSHOP CONDUCTED

- The Department of Electronics and Communication Engineering conducted a three-day workshop on “Signal Processing with MATLAB Programming and Simulink” from 20.10.2022 to 22.10.2022 in association with Cranes Varsity for 5th-semester students. Dr.Surekha R. Gondkar and Prof.Mamatha K. R. coordinated the event.
- Mr. Mohsin Khan, Corporate trainer, Cranes Varsity trained 84 students starting from the basic concepts of MATLAB programming to small projects on image and audio processing with hands-on. Also students got exposure to Simulink concepts with hands-on.



DEPARTMENTAL CO-CURRICULAR ACTIVITIES

OBE Activity 01

- As part of outcome-based activity a workshop on Multisim circuit simulator was conducted for 3rd semester B and C section students was conducted on 07.11.22. Multisim is a circuit simulator used for the analysis and simulation of a given electronic/electrical circuit. This workshop was organized and conducted by Dr.Surekha Gondkar, Associate Professor, and Dr.Rashmi N, Assistant Professor, Department of ECE.
- This workshop not only benefit the students in learning the circuit building and also it will help the students to analyse any circuit. In this workshop usage and advantage of the multisim is demonstrated and also encouraged the students to use for their network analysis and analog electronics courses for analysing the circuit and to know how the elements in the circuit behave with change in current or voltage. Around 65 students attended this workshop.



SEMINARS / EXPERT TALKS

BMSIT-NDLI Club of the Department of Library & Information Center and Department of Humanities & Social Science jointly celebrated Swami Vivekananda Jayanthi and organized a motivational talk on “Swami Vivekananda’s vision - my mission” on 16.01.2023 in Seminar Hall 1, First floor, Academic Block from 11.30 am to 2.30 pm for the 3rd-semester, students of ECE department. The speaker Ms. Rekha of Disha Bharat spoke about Vivekananda’s values and achievements and also motivated students to inculcate human values such as honesty, truthfulness, courage to speak and patriotism.



OTHER INITIATIVES BY THE DEPARTMENT

- Dr.Anitha V.R, Advisory/Technical Program Committee member in the Second International Conference on Augmented Intelligence and Sustainable Systems will be held in August 2023 at CARE COLLEGE OF ENGINEERING, Trichy, India.
- Dr. Anitha V R, Reviewer at the 1st IEEE International Conference on Microwaves, Antennas and Propagation Conference (MAPCON), organized by IEEE MTT/AP society, Bangalore JT Chapter from 12.12.2022 to 15.12.2022.
- Dr. Anil Kumar D and Prof. Thyagraj T. were invited as the resource persons for a 3 day workshop on “ Advanced Embedded Systems” conducted online by the Jain University, Kanakapura Campus, Bengaluru from 12.12.2022 to 14.12.2022

Edited and compiled by

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