

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

NEWSLETTER

ECE-AUTRONICS 2022-2023

Volume-8, Issue-1



Dr.T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Estd. 1986) Oorgaum, Kolar Gold Fields, Karnataka – 563120 (Affiliated to VTU, Belgaum, Approved by AICTE - New Delhi) NAAC Accredited 'A' Grade

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING AUTRONICS 2022-23



President's Message

Dr.T. Thimmaiah Institute of Technology has been serving many young engineering aspirants for more than three decades. The evolution of the institution for the past three decades has witnessed strong blend of state of the art infrastructure and human resources committed to provide professional education with thrust on creativity and innovation. Special emphasis is given to Outcome Based Education. Our institution provides ample opportunities for the students to acquire both technical and life coping skills which would enable them to empower themselves as useful citizens.

We encourage our faculty members to take up research activities, to acquire knowledge, innovation and newer insights that make teaching more vibrant and scientific.

I congratulate all the students who have been placed in various companies. My appreciation to all the staff for their team works in getting good results.

I am extremely happy to release the newsletter and also confident that the editorial team has covered all the recent happenings in the department of Electronics & Communication Engineering.

I wish all the students to excel in all fields and make their parents, institution and nation proud.

-Dr.T. Venkat Vardhan, President, GVET Principal's Message

I congratulate the Department of Electronics & Communication Engineering faculty for their achievements in the current academic year. I also congratulate the editorial team for their constant effort for the outcome of the newsletter.

Dr. Syed Ariff

Principal

Dr. T. Thimmaiah Institute of Technology, KGF

HOD's Message

The newsletter provides an overview of current activities that took place on our campus. The newsletter includes noteworthy accomplishments by the Department of Electronics & Communication Engineering, Dr. T. Thimmaiah Institute of Technology, KGF. I am delighted to publish the achievements of the Department of Electronics & Communication Engineering.

Dr. Vijaya Bharathi M,

Associate Professor (HoD ECE)

From the Editor's Desk

We congratulate the editorial team for release this newsletter brings out all the important achievements of faculty and students and other development activities under taken in the department. On behalf of the editorial committee, I thank our management for the support and encouragement rendered to keep up the standards of this edition of the newsletter.

Editorial Committee

Chief Editors: 1. Dr. Vijaya Bharathi M, Associate Professor (HoD ECE)

2. Dr. Jenitha A, Associate Professor IQAC Head

Editor: Prof. Mohana C, Assistant Professor

Students Editors: 1.1GV19EC007-Sakthi Raghavan C

2.1GV19EC010-Divya Swetha J

About the Department

The Department of Electronics & Communication Engineering was started in the year 1993 with the idea of equipping young people with the necessary technical knowledge and professional skills needed to address the challenges in the rapidly growing field of Electronics & Communication Engineering and promoting research in this area headed by Dr.Vijaya Bharathi M.

ECE department is a dynamic and vibrant department with highly qualified, experienced and dedicated faculty members. The curriculum in Electronics & Communication Engineering lays greater emphasis on design principles and development of Communication models, Signal Processing; Image processing, Embedded Systems and VLSI.

The young, dynamic and dedicated Staff members have succeeded in coaching the students and to equip them to face the future with confidence.

The major areas of faculty expertise of the department include Communication Systems, Computer Networks, Signal Processing, Image Processing, RF and Microwaves, and VLSI Systems. The department offers B.E in Electronics & Communication Engineering.

The department has various laboratories such as VLSI Design lab, Digital Signal Processing Lab, Circuits and Simulation Lab, Advanced Communication Lab, Computer Networks Lab, Microprocessor Lab, HDL Lab and Embedded Systems Lab to implement the required curriculum and skills.

The department also nurtures the inclination of the students towards Research and Development, besides giving them the necessary and sufficient backing of practical knowledge that they need. The Department provides access to high end software like Xilinx, Multisim, Code Composer Studio, Network Simulator, Cadence and MATLAB. Technical co-curricular and extra-curricular activities of the students include participation in Paper Presentation, Workshops, Seminars, Quiz, Technical competitions, Project Demonstration and participation in cultural activities channelized through the forum (EC GOLDEN ANWESHA) and events in the institution.

DR. T. THIMMAIAH INSTITUTE OF

VISION

To produce technically competent engineers having innovative skills positive attitude, leadership and professional ethics, with a focus on developing sustainable and new technology.

MISSION

- Create a conducive environment for teaching, learning and innovation by providing state of the art infrastructure.
- Learn sustainable and new technologies through industry institute collaborations.
- Produce technically competent engineers with ethics, discipline and socialconsciousness through holistic education.

DEPARTMENT OF ELECTRONICS & COMMUNICATION

VISION

"Graduates to be recognized in the field of Electronics & Communication Engineering ensuring academic excellence with innovative technical skills and professional ethics."

MISSION

- Imparting quality technical education through innovative teaching learning process.
- Active association with industry to meet the growing challenges in the society.
- Develop overall competency with professional ethics by providing training programs.

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FACULTY DEVELOPMENT PROGRAM (FDP).....6

DEPARTMENT

FACULTY DEVELOPMENT PROGRAM (FDP)

- 1. Dr.Jenitha A has participated in 5 days FDP on Leadership Skills conducted by ICT from 02-05-23 06-05-23
- 2. Dr Jenitha. A, Dr Vijaya Geetha. R, Prof. Tamilvani R, Prof. Mohana C and Prof Nandini G N attended the online Faculty Development Programme on "Artificial Intelligence and Machine Learning for Image Analysis Matlab & Python Perspective" organized by the Department of Electronics and Communication Engineering, CMR Institute of Technology, Bengaluru from 08-05-2023 to 13-05-2023.
- 3. Dr Jenitha. A, R, Prof. Tamilvani R, Prof. Mohana C and Prof. Nandini G N "Recent trends in AI and ML for Communication and Signal Processing Applications "organized by Dept. of ECE, East Point College of Engineering and Technology from 10th to 15th July 2023.
- 4. Dr. Vijaya Geetha R attended a FDP on "Emotional Intelligence" conducted by ICT Academy from 03.04.2023 to 06.04.2023.
- 5. Dr. Vijaya Geetha R attended a FDP on "Idea Generation Methods" conducted by ICT Academy fro 16.05.2023 to 19.05.2023.
- 6. Prof. Deepa B M and Prof. Shankavi K has attended the FDP on "VLSI Design using Cadence EI tools" from 28-03-2023 to 30-03-2023.
- 7. Prof. Deepa B M and Prof. Shankavi K has attended the FDP on "Introductory UHV under AICTE frog 22-05-2023 to 26-05- 2023.

DEPARTMENT ACTIVITIES

1. The department of ECE and EEE organized a online guest lecture on "Applications and future Requirements of signals and systems" on 20-01-2023 in association with IETE.



Students Attending the guest lecture on "Applications and future

Requirements of signals and systems" in edusat

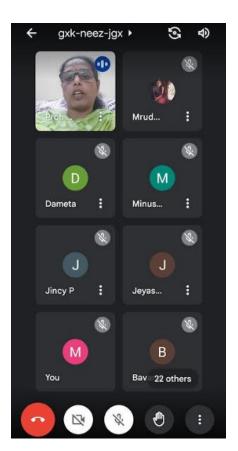
2. Students and Faculty of the department visited "Space on wheel exhibition" organised by Dr.TTIT on 03-03-2023.

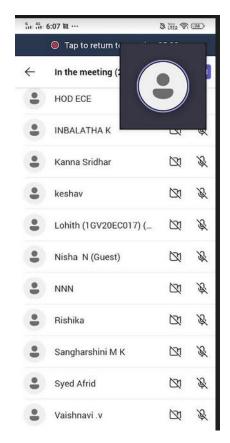




Space on wheel exhibition

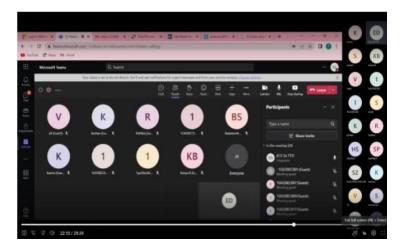
3. The department conducted parents-teachers meet for 3rd semester students on 02-11-2022 and for 5th semester students on 03-11-2022 regarding academics.





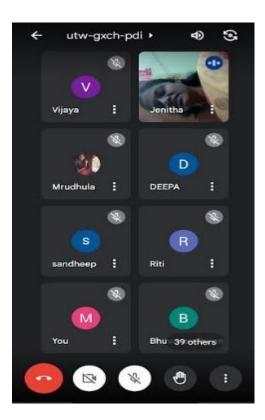
Screenshot of the meet

4. Online Meeting was conducted for 6th Semester students regarding academics, technical, cultural and sports on 27-10-2023.



Online Meeting was conducted for 6th Semester students

- 5. On-line Parents Teachers meet was conducted for 4th semester students on 25-05-2023 at 6:30PM. The agenda of the meet-
 - 1. 3rd sem results.
 - 2. Commencement of 4th sem Classes.





On-line Parents Teachers Meet

6. Students of 3^{td} and 8^{th} sem and Faculty of the department visited Bangalore IISC for "IISC" open day " on 04-03-2023.

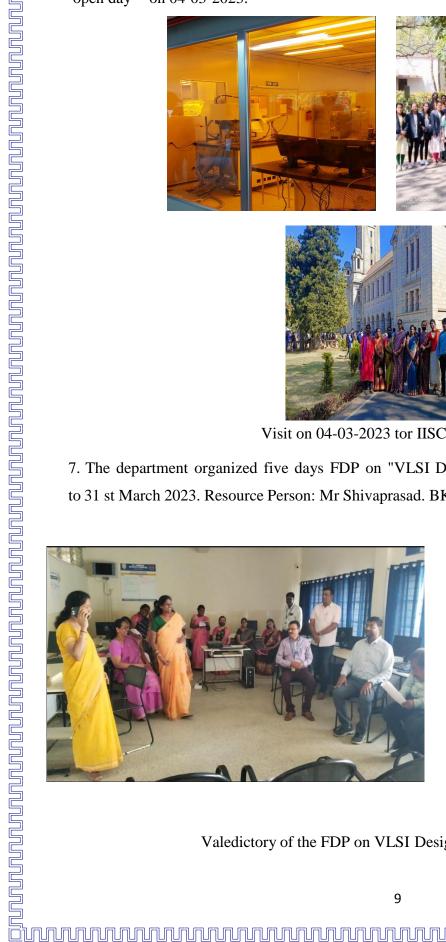






Visit on 04-03-2023 tor IISC open day

7. The department organized five days FDP on "VLSI Design using cadence EDA" from 27th to 31 st March 2023. Resource Person: Mr Shivaprasad. BK





Valedictory of the FDP on VLSI Design using cadence EDA

8. One day Seminar on career guidance on VLSI Design using cadence EDA tools, IoT, RF design "at students centre, DrTTIT, KGF by Ms.Divya Vani Mr.Vikas Gowda "Mr.Shashi kumar from Entuple Technologies, Bangalore on 13-04-2023.





Career guidance on VLSI Design

9. Industrial Visit to ISRO on 04-05-2023 by 8th Semester students accompanied by Prof. TamilVani, Prof. Jesudas J, Prof. Shankavi and Prof. Jeevika Mary.



Industrial Visit to ISRO on 04-05-2023 for 7th semester students

10. Industrial Visit to ISRO on 01-06-2023 by 6th Semester students accompanied by Prof. NandiniG N, Prof.. Deepa B M and Prof.Jeevika Mary A.



Industrial Visit to ISRO on 01-06-2023

11. Centre of Excellence for Youth Empowerment, a talk was delivered by Mr D.Vishnu Prasad, Karnataka State Head, ICT Academy on 24.02.2023 for final year students.





Centre of Excellence for Youth Empowerment

STUDENTS PARTICIPATION IN COLLEGE LEVEL EVENTS

1. Dr.TTIT in association with IIC Cell organized Project Expo on 20th May 2023 where ECE students exhibited their projects. Cash Prizes and Certificates were awarded to the winners.





Dr.TTIT Project Expo

2. A workshop on the title" Deep Drive into Python Libraries with Application Projects" was organized by Dr. TTIT in collaboration with IEI, IETE, IQAC,IIC from 20th to 22nd july 2023., our 4th semester students participated in the program.



Deep Drive into Python Libraries with Application Projects workshop with resource person

3. Students of the department participated in blood donation camp in Dr.TTIT on 16-06-2023.



Students of 4th semester receiving certificates under AICTE Activity (Blood Donation)

4. The students of the department participated in gold rush activities



Participants of Miss & Mr. Dr.TTIT

Vegetable carving by Ms. Kezia

Students participating in various activities

5. Session titled Problem Solving and Ideation workshop" is organized by the Institution's Innovation Council and Department of Electronics and Communication Engineering on 04/11/2022 at 3:00 pm.



Banner of the event

6. Dr. T Thimmaiah Institute of Technology under the banner of The Institution of Engineers -Kolar Local Centre celebrated 55th Engineers day at IEI Centre KGF on 15th September 2022. All Department Faculty members and Members of IEI Kolar Local Centre witnessed the program. The Chief Guest Mr. Nehru Babu - General Manager, BEML Ltd delivered a talk on Smart Engineering for Better World.





55th Engineers day Celebration

7. The overall championship for girls in sports for the academic year 2022-23 was won by Sindhuja-1GV20EC033



Overall championship award to Sindhuja-1GV20EC033

Program Educational Objectives (PEOs)

Graduates shall have the ability to

PEO1: Develop the engineering design, problem—solving skills and aptitude for innovations in multi-disciplinary areas.

PEO2: Manage resources skillfully as members and leaders to solve complicated real world problems.

PEO3: Be receptive to new technologies and attain professional competence through lifelong learning with Advanced degrees and other Professional Activities.

Program Specific Outcomes (PSOs)

Graduates will have the ability to

PSO1:- Apply the principles of Electronics in the field of VLSI and Embedded systems.

PSO2:- Apply the domain knowledge to design, analyze and develop optimal solutions in the field of Signal Processing and Communication with social concern.

PSO3:- Utilize acquired technical knowledge in Applied Electronics and multidisciplinary domains.

Program Outcomes (POs)

At the end of the B.E program, students are expected to have developed the following outcomes: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialisation to the solution of complex engineering problems.

- 1. Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialisation to the solution of complex engineering problems.
- Problem analysis: Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- 6. The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.

- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

