



THE SHETKARI SHIKSHAN MANDAL'S
**PADMABHOOSHAN VASANTDADA PATIL
INSTITUTE OF TECHNOLOGY
(PVPIT, PUNE)**

DTE CODE EN6122

Electronics & Telecommunication Engineering

HOD MESSAGE



Dr. Sunil Kumar Gaddam

HOD, Electronics and Telecommunication Engineering

Dear Readers,

As we embark upon the pages of the annual college magazine, reflecting on the academic year 2022-23, we find ourselves traversing through a journey that has been nothing short of eventful. The sesquicentennial celebration of our institute stands out as a testament to our rich legacy. The grandeur of gargoyles and arches bore witness to legendary talks, blending academic dynamism with festive zeal. The crescendo of this celebration culminated in a high note with a seminar on initiatives in higher education and education policy, in keeping with the illustrious history of our institution. In these challenging times, we remained committed to upholding the teaching-learning process, administration, and addressing the concerns of our student community. Our response echoes the vision of our founder members, who emphasized overcoming difficulties and scaling new heights of excellence. This edition of the annual college magazine encapsulates the spirit and diverse engagements on our campus. It is, perhaps, a reflection of 'The New Normal.' The collaborative efforts of our staff and student committee members, working remotely, have resulted in a creative tapestry that chronicles the year gone by. As we navigate through these pages, we acknowledge the challenges we face and express our collective hope to overcome this crisis soon. Let this magazine serve as a testament to our resilience, a symbol of our ability to adapt, and a beacon that guides us back to our world, where the spirit of human connectedness thrives. Wishing you an insightful and inspiring journey through the chronicles of our academic year.

Warm Regards,

HODENTC.

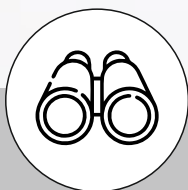
About of Electronics and Telecommunication Engineering

In education, the key to success is rooted in the genuine respect we show our students. The formidable task is transforming ideas into lived experiences. One cannot simply instruct another; the true role lies in facilitating the discovery of knowledge that already resides within each individual.

Respect forms the crux of successful education, where the challenge lies in materializing experiences from abstract ideas. Teaching isn't a process of instilling information; it's about assisting individuals in uncovering the wisdom latent within themselves.

Successful education hinges on the respect we afford our students. The primary challenge is to distill experience from ideas. It's not about bestowing knowledge but rather guiding individuals to unearth it from their own reservoir of understanding.

"While traditionally perceived as the fusion of electrical engineering and E&TC science, E&TC Engineering has undergone a transformative journey over the past five decades, establishing itself as an independent discipline of study. Rooted in a foundation built upon the principles and theories of mathematics, applied science, computing, and engineering, E&TC Engineering maximizes the utilization of these foundational tenets to tackle technical challenges. Through adept application, it efficiently designs hardware, software, processes, and networks, embodying a dynamic field that constantly adapts to technological advancements and societal needs."



DEPARTMENT VISION

- Set the standard for educational institutions by producing engineers who are both technically proficient and socially engaged, setting a positive example for the industry.



DEPARTMENT MISSION

- Commit to delivering superior professional education through a comprehensive teaching-learning mechanism. Build a supportive environment that fosters the cultivation of professional values in our students. Dedicate ourselves to providing quality professional education through an interactive teaching-learning model. Promote a positive environment that facilitates the instillation of professional values in our student body. Create a nurturing environment that instigates the development of strong professional values among our students.

Program Educational Objectives (PEO)

- Have professional competency to solve engineering problems in core & multi disciplinary domain.
- Have ability to develop sustainable product and processes for developing leading enterprise.
- Engage in lifelong learning to deal with social issues ethically.

Program Outcomes (PO)

Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, to model and analyse electronic systems.

Problem Analysis: Demonstrate the ability to identify, formulate, analyse & solve engineering problems.

Design/Development of Solutions: Demonstrate the ability to design a system components, or processes that meet specified needs with appropriate consideration for public health & safety

Conduct Investigations of Complex Problems: Demonstrate the ability to design experiments, test electronic circuits & analyse & interpret data.

Modern Tool Usage: Able to use modern engineering techniques, skills & computing tools necessary for engineering practice.

The Engineer and Society: Demonstrate to understand the impact of engineering solutions using contemporary technology in a global and societal, health, safety, legal issues.

Environment and Sustainability: Able to work professionally in electronics & telecommunication domain including the design and realization of such system to address social & environmental needs for sustainable development.

Ethics: Demonstrate the understanding of professional and ethical responsibility. Individual &

Team Work: Demonstrate the ability to function as an individual, team member or leader in inter-disciplinary settings.

Communication: Demonstrate the ability to communicate effectively with written, oral and visual means.

Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to manage projects.

Life-long Learning: Recognize the need for, and have preparation and ability to engage in independent life-long learning in the context of technological change.

Program Specific Outcomes (PSO)

- Demonstrate reasonable amount of proficiency in the areas of digital communication, embedded systems and project development.
- Utilize modern tools to analyze the performance of communication systems

Faculty Publications

Dr. S. M. Kulkarni

- RANSAC Algorithm for Matching Inlier Correspondences in Video Stabilization”, Inder science Int. Journal of Signal and Imaging Systems Engineering, Vol. 10, No. 4, 2017, pp. 178-184, ISSN 1748-0701 indexed by [Scopus \(Elsevier\)](#), [Emerging Sources Citation Index \(Clarivate Analytics\)](#), [cnLINKer \(CNPIEC\)](#), [Google Scholar](#), [Inspec \(Institution of Engineering and Technology\)](#)
- Stabilization of Jittery Videos Using Feature Point Matching Technique”, Advances in Intelligent Systems research (AISR), Atlantis Press Germany (Springer). Vol.137, Feb.2017, ISSN 1951-6851,pp728-737.
- Video Stabilization Using Feature Point Matching”, IOP Journal of Physics: 787 (2017) 012017 doi:10.1088/1742-6596/787/1/012017, indexed by Ei Compendex, Scopus, Inspec, Conference Proceedings Citation Index – Science (CPCI-S)(Thomson Reuters, Web of Science), NASA Astrophysics Data System, and other databases.
- Coding of video sequences using Three Step Search algorithm”, Procedia Computer science, 49, (2015), Elsevier pp.42-49.
- Performance Assessment of Robust & Efficient video stabilization algorithms based on L1-L2 optimization and s-R-t transform” UGC approved journal, International Journal of Scientific Research and Review 64650 (ISSN 2279-543x)volume 7,Issue 4,2018 .
- Performance assessment of video stabilization algorithms based on L1-L2 optimization and s-R-t Transform”, IEEExplore, June-2020
- Image compression using Discrete Cosine Transform Technique” Global Research Publication, J I S R 6(1), January-June 2012; pp. 25-36.
- Emotion recognition using signal processing,” International Journal of Advanced Research in Engineering Technology & Science ISSN: 2349-2819 Volume-9, Issue-6 June – 2022
- IOT based Environmental Monitoring System”, International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181 Vol. 10 Issue 06, June-2021

• Publications Award

- paper presented on “Video Stabilization Using Feature Point Matching”, in International Conference on Communication, Image and Signal Processing (CCISP 2016) at Dubai (UAE) organized by Asia Pacific Institute of Science and Engineering (APISE), in Nov.2016 awarded the prize for Excellent paper Presentation in the conference.

Dr. Raju Kamble

- Biquad filter based equalization for PMMA SI-POF links
- Impact of Component Sensitivity on Biquard Equalizer based on plastic optical fiber

Mr. Swapnil Dumre

- Audio compression using wavelet transform
- Polyp Detection in colon capsule endoscopy by using texture segmentation method

Text Books by Faculty

Dr. Sunil Kumar Gaddam

- Signals & Systems in Communtion: A Comprehensive Guide, AMK Corporation Academic Publisher, India.
- An Efficient Hardware Architecture for Multimedia Encryption with ISBN: 978-620-6-78578-1, LAP LAMBERT Academic Publishing, Dodo Books Indian Ocean Limited and OmniScriptum S.R.L publishing group, Republic of Moldova, Europe.

Dr. S. M. Kulkarni

- Power Devices & Circuits, Technical Publications (for Savitribai Phule Pune University).

Design Grant/Patents by Faculty

Dr. Sunil Kumar Gaddam

- A Indian Design Grant Patent on "A Novel mini Rice Quality Testing Machine for Farmers" with Application Number-397684-001 on 05/10/2024.
- IoT-Enabled Precision Agriculture Monitoring System" with App.No: 202441000307 on 02.01.2024.
- A Novel Method and System for designing VLSI Circuitry to Optimize the Integrated Circuit Operation" with App.No:202141020084 on 02.05.2021.
- A System and Method for Managing Pages in a Logical Network Gateway" with App.No:202141017310 on 13.04.2021.
- A Novel Method of Design of Low Power VLSI based Viterbi Decoder using Gate Diffusion Input" with App.No:202131004459 on 02.02.2021.

Patents by Students

- Accepts Fingerprint and otp code and allows access to drive (PD),App No.: 2017210345092
- voice based calculator App No.:2017210270783
- I-Chair Intelligent office chair App no:2018210156414
- FB-ERAdication App no:2018210251485
- home Security using vibration Sensor App No.201721070546
- Smart calling system App No.2018210087327
- Keeping hot water and cold water mixed with microcontroller system App No.201721045803
- A document image binarization technique for fore ground interference eradication

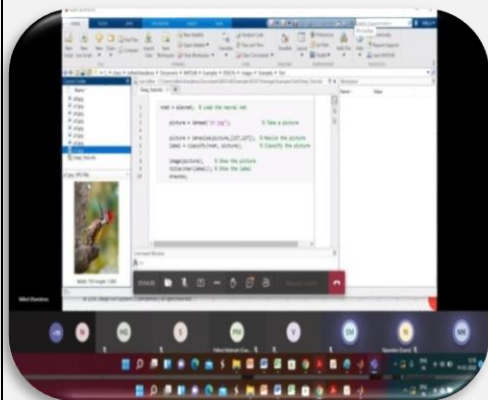
Results

UNDER-GRADUATE STUDENT TOPPERS ON THE BASIS OF CGPA

Final Year	GHANWAT MANASI SUBHASH	9.50
	MANE VAIBHAV BABASAHEB	9.45
	NAMBIAR SAMYUKTHA SAJEEVAN	9.00
	LOKARE AKSHAY SURAJ	8.96
	KANDHARE DIKSHA DILIP	8.88
Third Year	Dhobale Komal	9.14
	Vadak Harshal	8.36
	Rajhans Omkar	8.36
	Abhijeet	8.10
	Takalkar Smitha	7.90
Second Year	Atharva Bobade	9.20
	Shreyas Choughule	8.20
	Siddhi Ubhe	8.20
	Payal Yadav	7.95
	Pallavi solse	7.86

Departmental Activities

Workshops and Trainings:





2) Industrial visits:



Social Activities:



Technical Events:

