

## July 2022 to December 2022







**Department of Electronics and Telecommunications Engineering** 

# **Electronica Newsletter**

Department of Electronics and Telecommunication Engineering

#### July 2022 – December 2022

## DEPARTMENT VISION AND MISSION

#### Vision

To provide valuable resources for Industry and Society through research and excellence in Electronics and Telecommunication Engineering

#### Mission

- 1. Educating students with requisite technical expertise to meet the growing challenges of the Industry.
- 2. Promoting research through constant interaction with research bodies and various Industries.
- 3. Equipping students with fundamental subject knowledge to enable them for continuing Education.

#### Program Educational Objectives (PEOs)

- Graduates would be able to provides the Engineering solution with strong research capabilities in the areas of Electronics and Telecommunication Engineering.
- Graduates would be able to achieve good carrier using improved skill sets.
- Graduates would be able to provide a solid foundation and advanced programming skill in the field of Electronics.

#### Program Specific Outcomes (PSOs)

- 1. Apply knowledge to use modern tools and techniques for Electronics and Telecommunication Engineering
- 2. Identify Design, and Test Analog, Digital Communication Systems and Signal Processing using software and hardware tools.
- 3. Design and Develop computing systems while using best practices for software and hardware implementations.
- Create social and professional skills awareness for lifelong learning.

1. Engineering knowledge	2. Problem analysis	3. Design/development of solutions	4. Conduct investigations of complex problems
5. Modern tool usage	6. The engineer and society	7. Environment and sustainability	8. Ethics
9. Individual and team work	10.Communication	11. Project management and finance	12. Life-long learning

#### List of Program Outcome



## **Industry Institute Interaction**

#### Series of Technical Expert Talk

Sr. No.	Topic of Expert Talk	Name and Designation of Speaker	Class
1	Creativity , Invention and Innovations	Mr. R. P. Deshpande , Consultant for capacitor and Energy Management	S.Y. (Div. A,B&C)
2	Accept challenge learning through activities	Mr. V. V. Deshpande, Groundup Technologies Pvt. Ltd.	S.Y. (Div. A,B&C)
3	Career Awareness	CS Samruddhi Lunawat, Chairperson Awb Chapter of WIRC of ICSI	S.Y. (Div. A,B&C)
4	Importance of Software for Electronics Engineer	Mr. Sourabh Kelkar, Industry Expert	S.Y. (Div. A,B&C)
5	Developing Communication Skill in English	Dr. Kajal Mundada, Director ELA	S.Y. (Div. A,B&C)
6	Communication and Interview Skill	Mr. Parwez Khan, NLP master practitioner & breakthrough coach	T.Y. (Div. A & B)
7	5 G Mobile Communication	Mr. Deepak Kolte, Director Robonist	B. Tech (Div. A & B)
8	Startup and Incubation Culture	Mr. Sumit Kakrwal, CEO Q Electric Mobility Pvt. Ltd.	B. Tech (Div. A & B)









## **Industry Institute Interaction**

#### **Industrial Visit**

Sr. No.	Name and Address of The Company/ Industry	Domain	Class
1	Sterlite Technologies Pvt. Ltd., Waluj MIDC Aurangabad	Fiber Optic Communication	B. Tech (Div. A & B)
2	Liebherr Appliances India Pvt. Ltd. Shendra MIDC Aurangabad	Electronics Instrumentation	S.Y. (Div. A,B&C)
3	Endurance Technology Pvt. Ltd. Aurangabad	Machine's & Instrumentation	B. Tech (Div. A & B)
4	Bharat Insulation Company Pvt. Ltd. MIDC, Waluj, Aurangabad	Electrical Automobile, Switchgear's	B. Tech (Div. A & B)
5	Yugma Impression, MIDC Chikalthana, Aurangabad	Electrochemical & Medical Instrument's	T.Y. (Div. A & B)
6	Fintech Pvt. Ltd, MIDC Chikalthana, Aurangabad	Cutting-edge Oil Filtration Systems	T.Y. (Div. A & B)









## **Faculty Activities**

#### Product Developed by faculty of ETC Dept. under Faculty Hackathon 2022

Sr.No.	Name of the Participates	Project Title
1	Prof. R.M. Autee, Prof. K.B. Dandge	Android Based Automatic Lab Information System
2	Prof. A.M. Birajdar, Prof. L.K.Shevda, Prof. M.S. Badmera	Real Time Object/Age & Gender Detection using OpenCv
3	Prof. K.S.Ingle, Prof. V.K. Bhosale, Prof. U.A. Takte	Design and Development of Counting Mechanism for Pandemic Surveillance
4	Prof . Dr.S.A.Shaikh	Text Mining by Artificial Intelligence & Machine Learning (AI & ML)
5	Prof . Dr.S.A.Shaikh	Network Analysis by Artificial Intelligence & Machine Learning (AI & ML)

#### **Research Paper Publications (AY : 2022-23)**

Title of paper	Name of the author/s	Name of journal	ISBN/ISSN number
Smart Highway with Green Energy	Dr. Anita Nikalje	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	ISSN: 2321- 9653
Review on Smart Traffic Control by Vehicle Number Plate Detection	L.K.Shevada	International Journal of Scientific Research in Engineering and Management (IJSREM)	ISSN:2582- 3930
Smart Traffic Control by Vehicle Number Plate Detection	L.K.Shevada	International Journal of Scientific Research in Engineering and Management (IJSREM)	ISSN:2582- 3930
Dam Water Monitoring System Using IOT	M.S.Badmera	International Research Journal of Engineering and Technology (IRJET)	ISSN: 2395- 0072
Design and Development of Intelligent System for Early Detection of Acute Myocardial Infraction	A.R.Wadhekar	Proteus Journal	ISSN:0889-6348
Medication Remainder and Monitoring System using IOT	A.M.Birajdar	International Journal of Scientific Research in Engineering and Management (IJSREM)	ISSN:2582- 3930

#### **Quality Publications in Refereed/SCI Journals, Citations**

Sr. No.	Name of Faculty	Quality of Paper	Title of Paper	Journal/Conference Details	Date of Publication
1	Rajesh M. Autee	Scopus Indexed Journal	Design And Development Of Spice-Assisted Hybrid Driver Circuit For Measurement Of 4 Kw (5.5 Hp) Switched Reluctance Motor	Ymer -An International Peer- Reviewed Journal	24-01-2023
2	Anil M. Biradar	Scopus Indexed Conference	Method To Implement Load Network For High Efficiency Doherty Amplifier For 5g Application	IEEE International Conference On Interdisciplinary Approaches In Technology And Management For Social Innovation (Iatmsi-2022)	23-12-2022

#### Innovations by the Faculty in Teaching and Learning

**4** Multimedia Learning Google Classrooms Developed by faculty

Google Classroom Name	No. of Students Enrolled	Developed by
TY AI & amp; ML (A and B Div.)	75	Prof. Ashish S. Bhaisare
TY Mini Project (A and B Div.)	127	Prof. Ashish S. Bhaisare
TY Digital Communication	120	Prof. Ashish S. Bhaisare & Dr.A.V.Nikalje

#### **4** You tube channel of Faculty Members

Name of Channel	Youtube Link	Faculty Name	Course Name
Manthan Foundation	https://youtu.be/uD2eM35dK_U	Prof.Sunanda Kapde	Network Theory BTETC401, Mobile Computing BTETPE702F
KTM BOOSTER	https://www.youtube.com/@KTMBOOSTER	Prof.K.T.Madrewar	APTITUDE AND MATHEMATICS

## **Placement Details**

**Top Recruiters visited for Placement** 



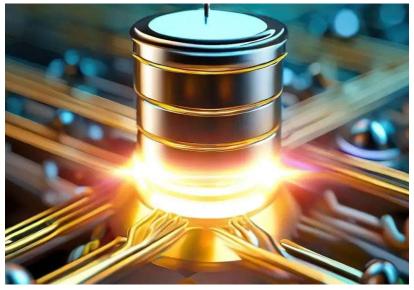
### Top Students placed this year

Sr. No.	Name of Students	Name of Company	Package in LPA
1	SARVESH DARAK	MAXLINER	25
2	MANGATE YASHWANT POPATRAO	CODITAS TECHNOLOGY	6
3	WANARE SAGAR SURESH	COGITO	3.6
4	VYAVAHARE ASHISH ASHOK	ELECTROKONNECT	1.8
5	PATHADE LAXMAN PRABHAKAR SARODE AKASH KALAYAN MOGARE GAJANAN ASARAM RAUT MAHESH SANJAY	EPITOME SUSTAINABLE ENERGY PVT LTD	1.2
6	PATIL VISHWAS VIJAY PATIL PRATHAMESH MAHESH	NIMAP INFOTECH	2.6
7	NAVTURE NIKHIL GAUTAM	RUCHA ENGINEERS PVT LTD - YANTRA - INTERNSHIP PROGRAM	2.4
8	GHUGE RISHIKESH MANOHAR GUNJKAR SUDIKSHA DILIPRAO JARWAL KARANSINGH AMARSINGH SONAWANE POOJA ANIL	TCS	3.36
9	DAHITE AASAWARI A CHABBRA PRABHJOT SINGH RAJURKAR RUCHA GOVINDRAO	VI	4.5

## **Electronica Tech News**

# Next-Gen Superconducting Diode: Enhancing Al Performance and Quantum Computing Scalability

A team of researchers has developed a high-efficiency superconducting diode with potential applications in scaling up quantum computing and enhancing AI systems. This device can process multiple signals simultaneously, a feature beneficial for neuromorphic computing, and is designed with more industry-friendly materials, paving the way for broader industrial applications.



A University of Minnesota Twin Cities-led

team has developed a new superconducting diode, a key component in electronic devices that could help scale up quantum computers for industry use and improve the performance of artificial intelligence systems.

Compared to other superconducting diodes, the researchers' device is more energy efficient; can process multiple electrical signals at a time; and contains a series of gates to control the flow of energy, a feature that has never before been integrated into a superconducting diode. A diode allows current to flow one way but not the other in an electrical circuit. It's essentially half of a transistor, the main element in computer chips. Diodes are typically made with semiconductors, but researchers are interested in making them with superconductors, which have the ability to transfer energy without losing any power along the way.

The method the researchers used can, in principle, be used with any type of superconductor, making it more versatile and easier to use than other techniques in the field. Because of these qualities, their device is more compatible for industry applications and could help scale up the development of quantum computers for wider use.

## **Electronica Newsletter**

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#### Editorial Team

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Marathwada Shikshan Prasarak Mandal's

## Deogiri Institute of Engineering And Management Studies



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