

DTE CODE 4151

TULSIRAMJI GAIKWAD-PATIL Collage of Engineering & Technology An Autonomous Institute

NAAC Accredited

www.tgpcet.com

DEPARTMENT NEWS LETTER (2022-23)

Department of Electronics & Communication Engineering



Department of Electronics & Communication Engineering

About TGPCET

Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) was established in the year 2007 by Vidarbha Bahu-uddeshiya Shikshan Sanstha (VBSS), a registered society. It is a self financed Private Engineering College, which is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU) Nagpur and is approved by All India Council for Technical Education, New Delhi. Also college is approved by Directorate of Technical Education (DTE), Mumbai, Maharashtra State. The Institute is Accredited with A+ (3.32 CGPA) by NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC). An Autonomous Institute affiliated to RTM Nagpur University, Nagpur

Institute Vision Mission

Vision-

To emerge as a learning Center of Excellence in the National Ethos in domains of Science, Technology and Management.



Mission-

To strive for rearing standard and stature of the students by practicing high standards of professional ethics, transparency and accountability.

To provide facilities and services to meet the challenges of Industry and Society.

To facilitate socially responsive research, innovation and entrepreneurship. To ascertain holistic development of the students and staff members by inculcating knowledge and profession as work practices

Departmental News Letter (2022-23)

About Department

Established with B.E. ECE in the year 2007-08 with an intake of 60.It has been one of the key departments, active in teaching and research since its inception in 2007. It has well qualified and experienced faculty with novel teaching methods.

Research and training activities are based on VSAT, Atmel, $\mu P \& \mu C$ and SATCOM laboratories. A separate computing facility has been established to carry out project work and design jobs taken up by the department.

The Department has a state-of-the-art Microwave & Radar Engineering Laboratory in addition to well-equipped laboratories in the areas of Electronic Devices. Communication Engineering, Digital Signal Processing, Microprocessor and Microcontroller and Digital Electronics. The department has Industry Institute Partnership Cell (IIPC) which aims to establish and explore proper links with various departments, agencies and industries all over the country. It also aims to work in close coordination with the industries and organizations for placement and training of the students, to support R & D and sponsored projects from industries, to exchange personnel between the Industries and the Institute by organizing guest lectures by Industrial experts, evaluation of project work, development of curriculum as per industry needs and other academic work in the Institute.

Department Vision

To serve the society by creating competent Electronics and Communication engineers with value added quality education and holistic development.

Department Mission

- ➤ To produce globally competent and well cultured Electronics and Communication engineers through outcome based education.
- ➤ To imparting attitude, knowledge, skills, project-based learning using well defined teaching learning process and excellent learning facilities.
- ➤ To lead, integrate, deliver multidisciplinary research and development to serve the needs of society and industry.
- ➤ To empower youth for developing them as a leader through lifelong learning and prepare them for ethical and social concern

ACADEMIC COUNCIL

| Sr. No | Name of the Member | Designation in the Council |
|-----------|---|-------------------------------|
| L | Dr. A. V. Kale, Principal | Chairman |
| 2. | Dr. O.G. Kakde, Director, IIIT, Nagpur | Academic Expert |
| 3. | Mr. Manish Sanghavi, Executive Director, Sanghavi Industries Pvt. Ltd., Nagpur | Industry Expert |
| 4. | Dr. S.W. Rajurkar, Associate Professor, Govt. College of Engineering, Chandrapur | Academic Expert |
| 5. | Dr. G.K. Awari, AICTE Margdarshak to the Institute and Head AE, GP Nagpur | Academic Expert |
| 6. | Dr. A.N. Dabhade, Associate Professor and Dean Admission, Kavikulguru Institute of Technologyand Science (KITS), Ramtek | VC Nominee |
| 7. | Dr. D.S. Bhowmik, Vice-Principal and Head First Year, Jhulelal Institute of Technology, Nagpur | VC Nominee |
| 8. | Dr. Tushar Shende, Controller of Examination, G H Raisoni Institute of Engineering and Technology, Nagpur | VC Nominee |
| 9 | Dr. Prashant Kadu, Director IIIL, GPGI | Member |
| 10. | Prof. Pragati Patil, Vice-Principal | Member |

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| 11. | Prof. Radharaman Shaha, CoE | Member |
|-----|--|---|
| 12. | Prof. Amey R. Khedikar, Registrar | Member |
| 13. | Dr. N.V. Chaudhari, HoD, CSE | Member |
| 14. | Dr. Pravin Tajne, HoD, ECE | Member |
| 15. | Dr. S.S. Rathore, HoD, CE | Member |
| 16. | Dr. P.V. Thakre, HoD, EE | Member |
| 17. | Dr. Shubhangi Gondane, HoD, ME | Member |
| 18. | Dr. Vijay Talodhikar, HoD, AE | Member |
| 19. | Dr. Pramod Nandhardhane, HoD, MBA | Member |
| 20. | Prof. Roshan Chandekar, HoD, MCA | Member |
| 21. | Dr. Bhavana Deshpande, HoD, GE | Member |
| 22. | Prof. Sarvesh Warjurkar, HoD, IT | Member |
| 23. | Prof. Anup Bagade, HoD, BT | Member |
| 24. | Prof. Sanjay Bhadke, Asst. Professor, CE | Member |
| 25 | Prof. Anup Gade, Dean Academics | Member Secretary |
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Board of Studies Composition of Electronics & Communication Engineering

| Sr. No | Name of the Member | Designation | | |
|-------------------------------------|--|-------------------|--|--|
| Chairperson & Members of Department | | | | |
| 1. | Dr. Pravin Tajane,Sr.Asst.Professor TGPCET, Nagpur | Chairman | | |
| Members of Board of Studies | | | | |
| 2. | Ms.Rohini Pochhi | Member | | |
| 3. | Mr. Rahul Dhuture | Member | | |
| 4. | Mr. Sandeep Thakre | Member | | |
| 5. | Mr. Kushal Masarkar | Member | | |
| 6. | Mr. Suraj Mahajan | Member | | |
| 7. | Mr. Mayuri Harde | Member | | |
| Other than home university experts | | | | |
| 8. | Dr. A. G. Kothari, Associate Professors, VNIT, Nagpur | Subject Expert | | |
| 9. | Dr. Tapan Kumar Jain ,Assistant Professor, IIIT, Nagpur | Subject Expert | | |
| 10. | Dr. Ankit Bhurane , Assistant Professor ,VNIT, Nagpur | Subject Expert | | |

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| On | e expert to be nominated by VC recommend | by college Principal |
| 11. | Dr.A.B. Jirapure, Assistant Professor, PCOE, Nagpur | Subject Expert |
| | One industry experts (as per point no. 05 o | of composition) |
| 12. | Mr.Sanjay Apturkar, Associate Scientist, Remote Sensing Area, Ambazari, Nagpur | Industry Expert |
| One me | eritorious post graduate alumnus (as per poi | nt no. 06 of composition) |
| 13. | Ms. Yuga Dhawale, R&D Head, Microtech Inductions Pvt.Ltd, Mumbai | Alumni |
| | | |

PEO of Department

- PEO 1: Students will apply basic fundamentals in mathematics, physics and electronic engineering discipline to build sound foundations.
- PEO 2: Students will design, analyze and solve engineering problems to develop them as the professional leaders in the field of Electronics & communication Engineering.
- PEO 3: Students will get exposure by providing technical training to execute the multidisciplinary projects as a team.
- PEO 4: Students will channelize their knowledge through lifelong learning to assist in the development of the society.
- . PEO 5: Students will acquire work ethics and concern for society



Program Outcome

- PO1: An ability to independently carry out research /investigation and development work to solve practicalproblems.
- PO2: ability to write and present a substantial technical report/document.
- PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of theprogram. The mastery should be at a level higher than the requirements in the appropriate bachelor program

PSO of Department

- PSO 1: Apply the fundamental concepts of electronics and communication engineering to design a variety of components and systems for different Electronics applications.
- PSO 2: The ability to use analytical knowledge by applying modern hardware and software tools to solve
- Electronics & Communication Engineering problems.
 - PSO 3: Develop their skills to solve Electronics & Communication related problems & asses social,

environmental

issues with ethics & manage different projects in multidisciplinary areas

Student Achievement in Activities

"Student of Final Year ECE Department Secured Best Paper Award in "IC-DTSDG-22" Organized by TGPCET, Nagpur





"Industrial Visit" Oberoi Centre of Excellence (OCE) for Robotics"





Introduction:

Department of Electronics & Communication Engineering under ISTE and IEI student chapter have organized a Industrial visit to "Oberoi Center of Excellence (OCE) for Robotics"

Aim: To Study and understand the operation of Robot and Rapid Programming Language using Robot studio software

Objective:

- 1. To make the students aware of Robot & Software.
- 2. To know the student about Robot welding mechanism and functionality of different operations.
- 3. To understand the working of Robot & its Rapid prototypes.

GUEST LECTURE ON "Brain Signal Processing"





Introduction:

Department of Electronics & Communication Engineering under ISTE and IEstudent chapter have organized a guest lecture on topic "Brain Signal Processing" by Dr. Ram Bilas Pachori , Professor IIT Indore. Senior member of IEEE & fellow of ISTE, IEI & IET.

(I) .

Aim:

To understand Brain Signal Processing Technologies, Analysis and Application **Objective:**

- 1. Primary goal of signal processing is to explain the indications for obtaining an ECG.
- 2. Describe the procedure for obtaining an ECG & review the clinical significance of ECG.
- 3. Introducing the students to the fundamentals of machine learning (ML) techniques useful for various signal processing applications.
- 4. Expert focused on applications in signal processing and communication





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Laboratories









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