

GOVERNMENT POLYTECHNIC KHAMGAON

(Under Directorate of technical Education, Maharashtra Government)

Department of Electronics and Communication Engineering

(Dec 2019 - Feb 2020)

NEWSLETTER

01 MARCH, 2020



Chief Editor: Shri. Rajeshwar G. Takwale (LET)

Co - Editor: Shri. Sagar A. Jumde (LET)

Publisher: Shri. B. P. Deosarkar (HOD, ET Dept.)

Advisory Committee: Smt. A. P. Ahir (LET)

Shri. D. B. Borude (LET)

Shri. N. R. Soni (LET)

Shri. A. A. Patil (LET)

Contact us:

Department of Electronics and Communication Engineering.

Government Polytechnic, Khamgaon

Jalamb Road, Amrut Nagar, Khamgaon - 444303, Maharashtra, India.

Website: <http://www.gpk.edu.in>

E-mail: office.gpolykhamgaon@dt Maharashtra.gov.in

Phones: 07263-256644 /254609 **Fax:** 07263-252278

VISION:

“Competently excellent man power developing department of the institute, imparting quality technical skills in Electronics and communication engineering and allied fields, catering to needs of industry and society.”

MISSION:

Department of Electronics and Communication Engineering is Committed to:

- [1] Impart quality technical education through effective curriculum implementation using modern teaching learning process and engineering tools.
- [2] Strive continuously for alignment of infrastructure and facilities with recent technological Developments.
- [3] Catalyze industrial exposure and encourage skill up gradation of students, staff and faculties.
- [4] Facilitate development of generic skills, social and environmental awareness and ethical values among the student along with professionalism and passion for lifelong learning.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS):

- **PEO1:** Provide socially responsible, environment friendly solutions to Electronics and Telecommunication engineering related broad-based problems adapting professional ethics.
- **PEO2:** Adapt state-of-the-art Electronics and Telecommunication engineering broad-based technologies to work in multi-disciplinary work environments.
- **PEO3:** Solve broad-based problems individually and as a team member communicating effectively in the world of work.

PROGRAM OUTCOMES (PO's):

- **PO1. Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the Electronics & Communication Engineering problems.
- **PO2. Problem analysis:** Identify and analyze well-defined Electronics & Communication Engineering problems using codified standard methods.
- **PO3. Design/ development of solutions:** Design solutions for well-defined Electronics & Communication Engineering related technical problems and assist with the design of systems components or processes to meet specified needs.
- **PO4. Engineering Tools, Experimentation and Testing:** Apply modern Electronics & Communication Engineering tools and appropriate technique to conduct standard tests and measurements.
- **PO5. Engineering practices for society, sustainability and environment:** Apply appropriate Electronics & Communication Engineering technology in context of society, sustainability, environment and ethical practices.
- **PO6. Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined Electronics & Communication Engineering activities.
- **PO7. Life-long learning:** Ability to analyze individual needs and engage in updating in the context of Electronics & Communication Engineering related technological changes.

PROGRAM SPECIFIC OUTCOMES (PSO's):

PSO 1. Electronics and Telecommunication Systems: Maintain various types of Electronics and Telecommunication systems.

PSO 2. EDA Tools Usage: Use EDA tools to develop simple Electronics and Telecommunication engineering related circuits.

PSO 3. Local Industry Need: Supervise different parameters in process industries employing Electronic/Electrical automation.

From Principal's Desk:



It gives me great pleasure to congratulate students, teachers and staff of Electronics and Comm. Engg. Department for the publication of this newsletter. Newsletter is believed to serve the purpose of reflecting the inside activities i.e. academics, co-curricular & extra-curricular activity, students and faculty achievements as well as innovation occurring in the department. In the era of engineering and technology this newsletter will

motivate the teachers and students of sharing their creativity and new ideas with the world and will help in their overall development. I wish best of luck for all the team members for publication of newsletter.

From HOD's Desk,



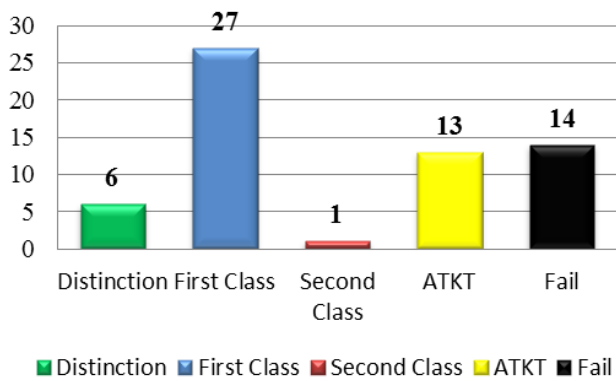
It gives me immense pleasure to present this issue of Newsletter when department is preparing for NBA accreditation, the role of a Department is not only to pursue academic excellence but also to motivate and empower its students to develop lifelong learning ability and implementation of engineering technology in context of society, sustainability, environment and ethical practices. As we know, we are implementing outcome based curriculum for which department is committed to provide conducive learning environment striving for upgradation of facilities and avenues for overall development.

I wish best of luck students & staff and congratulate them for bringing this E-Newsletter.

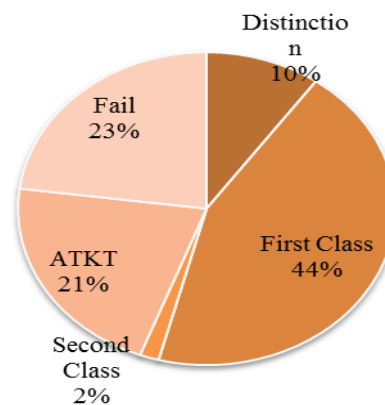
Result Analysis of Winter - 2019 Examination

Class	First Semester	Third Semester	Fifth Semester
Distinction	6	17	22
First Class	27	22	8
Second Class	1	0	0
ATKT	13	0	0
Fail	14	14	0
Total	61	53	30

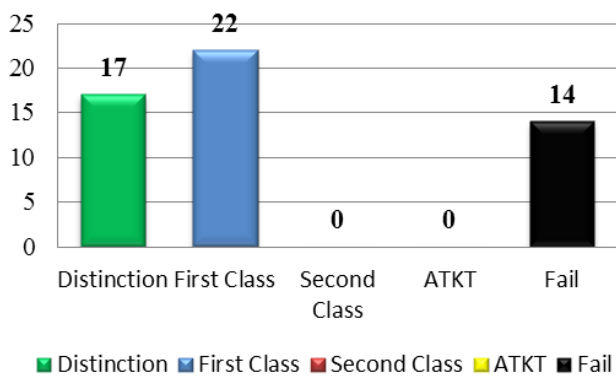
First Semester



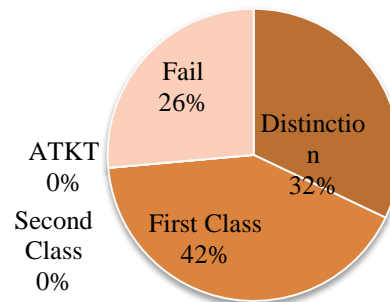
First Semester



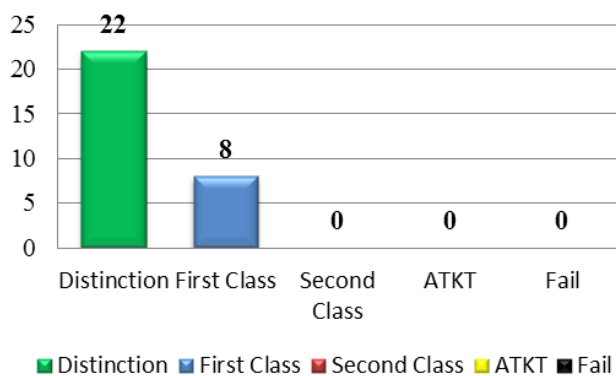
Third Semester



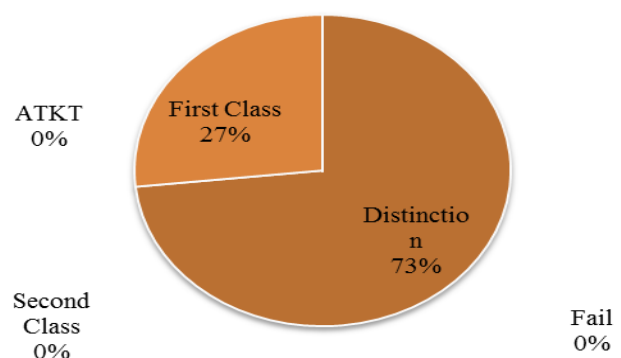
Third Semester



Fifth Semester



Fifth Semester



Student Achievements “Glowing Stars”

Electronics and Communication Engineering Department students have kept continue the legacy of good academic results this year also. **Harsh Khatri** scored 91.41% and **Amulya Kale** Scored 90% in Final Year and secured 1st and 2nd Rank respectively. **Rajat Patil** stood 1st with 93.43% and **Neha Bedre** stood 2nd with 88.82% in second year. In First Year, **Pranav Dhandar** and **Vaishnavi Chopde** both secured 1st rank with 83.43% and **Pratik Jawale** secured 2nd rank with 79.14%.



Apart from academics, **Shweta Bhagat** from final year gave Karate Training to female students under program **Kali Umaltana** ..(कली उमलताना). Considering her contribution towards women empowerment, **Shweta** is felicitated by Hon. Guardian Minister, **Dr. Rajendra Shingane** and **Dr. Dilip Patil Bhujbal (SP, Buldana)**.



Also in academic year 2019-2020, students from program has participated in various inter institute and national level events and won the prizes.

Sr. No.	Name of Participant	Name of Event	Type of Event
01.	Harsh Khatri	IEDSSA - Chess	Inter Institute
02.	Harsh Khatri	IEDSSA – Table Tennis	Inter Institute
03.	Yashodip Hiwrale		Inter Institute
04.	Sandesh Mahajan		Inter Institute
05.	Samruddhi Parkhedkar		IEDSSA – Badminton
06.	Gauri Jalamkar	IEDSSA – Chess	Inter Institute
07.	Harsh Khatri	Ignite – Circuit Mania	National Level Technical Event
08.	Yashodip Hiwrale		
09.	Harsh Khatri	Vidyotan 2020 – Circuit Fixer	National Level Techfest
10.	Yashodip Hiwrale		
11.	Jaydip Ubale		
12.	Shweta Bhagat	Techelons 2020 Project & Model Exhibition	National Level Technical Event
13.	Vaishnavi Bharambe		
14.	Jayashri Karande		
15.	Shilpa Bhangale		

Faculty Achievements:

- Smt. Archana P. Ahir, presented research paper on “Driver Inattention System: A Review” at ICITAET - 2019 International conference organized by Shri Sant Ganjanan Maharaj College of Engineering, Shegaon on 27th and 28th Dec, 2019.
- Shri. Dinesh B. Borude completed part of his two weeks pre PhD work at National Institute for Technical Teachers Training and Research, Chandigadh.

Expert Lecture:

- Expert Lecture on “Industrial Aspects of PLC ” by Mr. Sunil Khade, Shilp Gravures Ltd. Ahmadabad has been conducted on 14/01/20202.
- Expert lecture on “Digital Pulse Modulation Methods” by Mr. P. U. Awate, Lecturer in Electronics Engineering, Government Polytechnic Ambad has been conducted on 26-02-2020.



Workshop and Industrial Visit organized by the department:

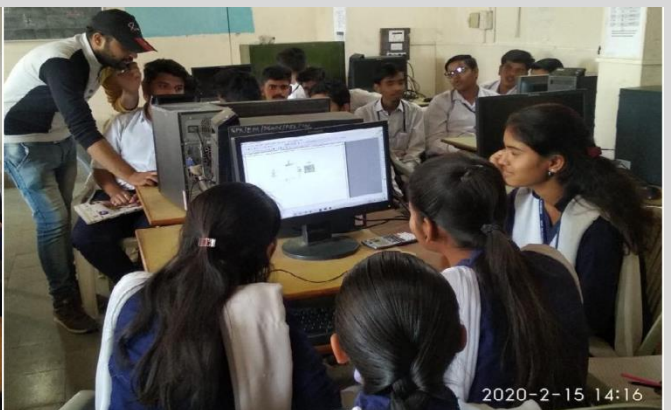
- One day workshop on “Entrepreneurship Development” was organized on 01st Feb, 2020 for final year students of Electronics and communication department and Civil Engineering department. It was coordinated by Shri. Manas Ghodle (LCE) and Shri. Rajeshwar Takwale (LET).



- Shri. Nitin Soni (LET) and Shri. Dinesh Borude (LET) organized “SITCOM TECHNO EXPO” project- model exhibition on the occasion of KALAVISHKAR 2020.



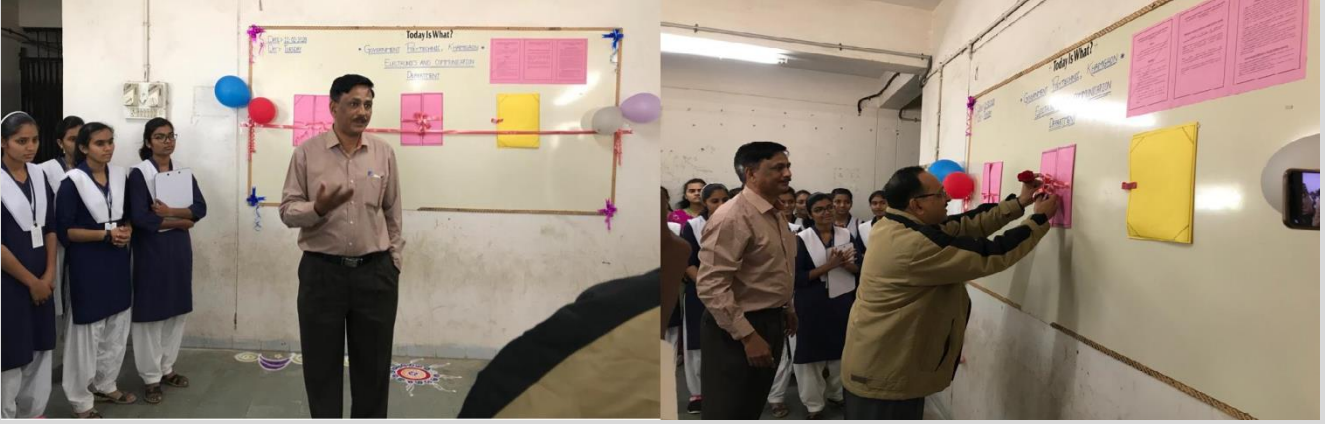
- Our alumni Mr. Mohit Vyas (currently studying in 3rd year of graduation in Shri Sant Gajanan Maharaj College of Engineering, Shegoan) conducted one day workshop on “PCB MAKING” on 15th Feb, 2020 for first year students of Electronics and communication department.



- Industrial visit of second year and third year students at Jaydip Motors, Khamgaon and at Buldana urban Textile Spinning Mill, Dongar-khandala, Buldhana is scheduled during second and third week of March, 2020.

Inauguration of Cultural Board:

• Our beloved HOD Shri. B. P. Deosarkar sir provides the opportunity to break out and try something different. **Cultural Board** is perfect platform for the students to come forward and showcase their talents. Department aims at nurturing the skills and upbringing of the hidden co-curricular talents. Cultural Board is inaugurated in the department by Hon. Principal Dr. S. S. Prabhune and B. P. Deosarkar (HOD, ET).



Visit of Hon. Dr. Abhay Wagh (Director DTE, Mumbai):

• Hon. Dr. Abhay Wagh, Director DTE Mumbai, Dr. D. V. Jadhav, Joint Director, Regional office, Amravati and Dr. S. J. Patil, Deputy Secretary- RBTE Nagpur visited our institute. During his visit he had interacted with various industrialists from Khamgaon area and staff of college. New office building is inaugurated by Hon. Dr. Abhay Wagh Sir.



Self Defense Program for Girls:

- Inauguration of self-defense for girls was done by the hands of Hon'ble Principal Dr. S. S. Prabhune. Nearly 90 girl students from our department and institute are participating.



Sports and Cultural Program at Regional Office, Amravati:

- Sports and Cultural Program was organized at Regional Office, Amravati by joint director Dr. D. V. Jadhav. Faculties from department Shri. R. G. Takwale, Shri. S. A. Jumde, Shri. A. A. Patil participated in events.



Celebration of Republic Day:

Government Polytechnic Khamgaon and Department of Electronics and Communication Engineering proudly celebrates the Republic Day on 26th January, 2020. Flag hosted by Hon'ble Principal Dr. S. S. Prabhune Sir.



Shining Alumni

Dr. Anupsingh R. Rajput

Academician!!! Administrator!!!



Our shining alumni Dr. Anupsingh R. Rajput had passed diploma in Electronics & Comm. Engg. in 2005. He completed his graduation from Dr. D. Y. Patil college of Engineering, Akurdi, Pune and M. Tech from Rajiv Gandhi Prodyogiki Vishwavidyalay, Bhopal. Also He is awarded D. lit (Honorary Doctorate) from University of South America.

Apart from one year experience in EPCOS Company, now he is working as a **Principal** at renowned **Rambhau Lingade Polytechnic, College** at Buldana. He has published 08 national level and 08 international level research paper. With responsibility as an Institute Head, he is Center Coordinator of Cambridge Center of excellence JEE, NEET at Buldana.

Yogesh Vinayakrao Mahale

“Miracles do happen but one has to work terrifically hard for it”



Let's meet another gem of GPK, **Yogesh V Mahale**, a son of farm worker and now become an Officer in Indian Army.

He born at gram Mandwa, rural area of Taluka Jalgaon Jamod. He completed his diploma in Electronics and Comm. Engg. in 2013 and graduation from Babasaheb Ambedkar Technical University, Lonere.

During his graduation, he came across a seminar by Brig Baljeet Singh Gill (retd.) on *CAREER IN ARMED FORCES* and inspired to join Indian Army. Latter he joins Pre Cadet Training Centre at Nashik where he clears Combined Defense Service (CDS) exam. But his target of SSB (Services Selection Board) exam doesn't allow him to take sound sleep.

SSB is 5 days interview procedure, considering one of the tough examinations in India. Upon failed in consecutive 4 times, Yogesh successfully passed SSB. He joins officer training academy on 1st April 2018 and completed training on 9th march 2019 and that day my dream came true to wear that **prestigious Olive Green Uniform with two golden stars** on his shoulder pipped by his Baba and Aai.

Faculty Speaks:

From Problem to Challenge and from Opportunity to Growth !!!



We grow up playing around favorable and unfavorable conditions in life. Unless everything is going as per our expectations, we are happy. However, when the people and event does not go as desired or when we struggle with circumstances, we tend to see them as a problem. Everything happens for a reason here. We cannot control everything around us but we can decide how those things affect us. It takes courage to keep going in the dark. Each of these problem tests your courage. See them, as they are form of challenge.

How you face these challenges is what determines our inner strength.

Let us see how we can better understand the situations called problems in life with the help of a famous story.

We all know the famous story of a race between tortoise and rabbit in which tortoise wins the race and its moral—slow and steady win the race. But the real story doesn't end there and let's rewind the story with broader vision.

A tortoise and a rabbit had an argument about who was faster. They decided to settle the argument with a race. They agreed on a route and set off. The rabbit shot ahead and ran briskly for some time. Then seeing that he was far ahead of the tortoise, he fell asleep under a tree. The tortoise overtook the rabbit and soon finished the race, emerging as winner.

The moral no. 1: Slow and steady wins the race.

The rabbit realized that he had lost the race only because he had been over-confident, careless and lazy. If he had not taken things for granted, the tortoise could not have beaten him. So he challenged the tortoise to another race. The tortoise agreed. This time, the rabbit went all out and ran without stopping from start to finish. He won by several miles.

The moral no. 2: Fast and consistent will always beat the slow and steady. It's good to be slow and steady, but it's better to be fast and consistent.

The tortoise realized that there's no way he could beat the rabbit in a race the way it was currently formatted. He thought for a while and then challenged the rabbit to another race, but on a slightly different route. The rabbit agreed. They started off, in keeping with his self-made commitment to be consistently fast. The rabbit took off and ran at top speed until he came to a river. The finishing line was a couple of kilometers on the other side of the river. The rabbit sat there wondering what to do. In the meantime, the tortoise got into the river, swam to the opposite bank, continued walking, and finished the race.

The moral no. 3: First, identify your core competency and then change the playing field to suit your core competency. Working on the basis of your strengths will not only get you noticed, but will also create opportunities for growth and advancements.

The story still continues. The rabbit and the tortoise, by this time, had become good friends and they did some thinking together. They decided to run the race again, but this time, as a team. They started off, and this time, the rabbit carried the tortoise till the riverbank. Then, the tortoise took over and swam across with the rabbit on his back. On the opposite bank, the rabbit again carried the tortoise and they reached the finishing line together. They both felt a greater sense of happiness, satisfaction and success.

The moral no. 4: It is good to be individually motivated and to have strong core competencies, but unless you're able to work in a team and harness each other's core competencies, you'll always perform below par, because there will always be situations in which you'll do poorly and someone else will do well. Teamwork is mainly about situational leadership, letting the person with the relevant core competency in a situation take the leadership.

Note that neither the rabbit nor the tortoise gave up after failure.

The moral no. 5: When we stop competing against a rival and, instead, start competing against the situation, we perform far better.

Do you know that our selection of words and terms make huge difference in our mindset. Once we replace the word "problem" with "challenge", we can face the situation with more courage.

Martin Luther King, Jr. has very rightly said that, "The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy."

Shri. Manas Ghodle

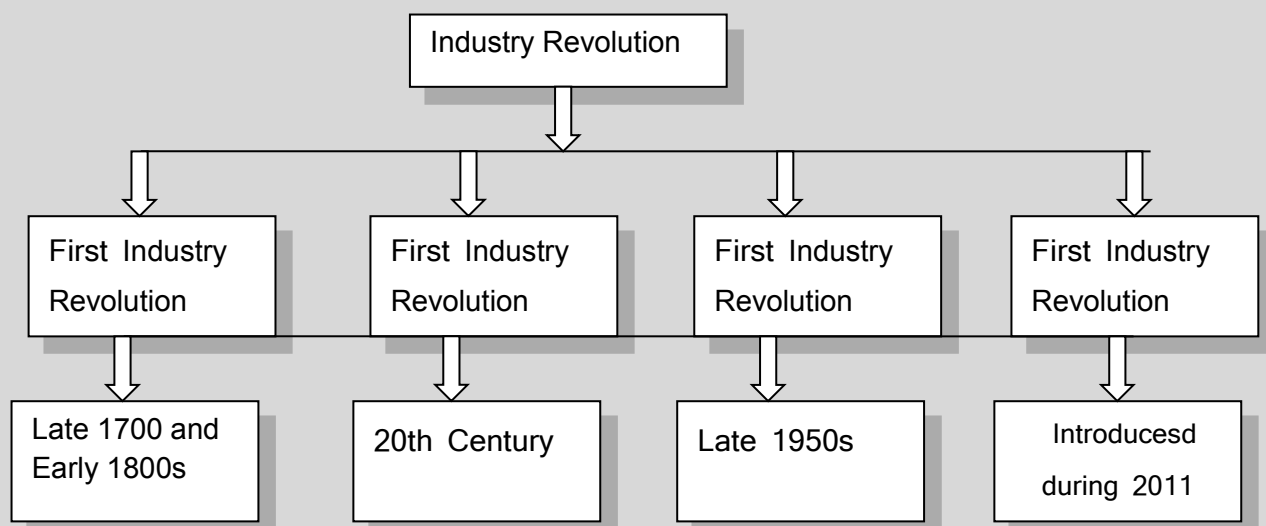
Lecturer in Civil Engineering Department
Government Polytechnic, Khamgaon

Industrial Revolution: A need of the day for enhancing Employability learner



Industrial revolution is refers to the changes in manufacturing and transportation that began with fewer things being made by hand but instead made using machines in larger-scale factories . The following figure illustrates journey of Industrial revolution in brief. The .Industry 4.0 refers to a new phase in the Industrial Revolution that focuses heavily on interconnectivity, automation, machine learning, and real-time data. Industry 4.0, also sometimes referred to as IoT or smart manufacturing, marries physical production and operations with smart digital technology, machine learning, and big data to create

a more holistic and better connected ecosystem for companies that focus on manufacturing and supply chain management.



"Industry 4.0" is a vision commonly used to describe the concept of "Smart Factory" of the future. In smart factories, the manufacturing processes will be fully automated and cyber-physical systems will be able to communicate with one another and integrated networks to achieve a common goal.

The diploma Engineers must be ready to face the challenges of industry version 4.0. Along with their curriculum of programme they must achieve excellence in the IoT to bridge the gap between their present curriculum and recent trends. They must observe NPTEL (National programme of technology enhanced learning) Lectures. The learners must enroll their candidature for SWAYAM MOOCs platform which is World's Largest Online Free E-Learning Platform Portal designed to achieve the three cardinal principles of Education Policy viz., Access, Equity and Quality. This platform will enhance your knowledge base and confidence. The Industry version 4.0 mainly talks about Enterprise Resource Planning, Internet of Things /Industrial Internet of Things, Big data, Artificial intelligence , M2M(machine-to-machine), Digitization, Digitization, Machine learning, Cloud computing, Real-time data processing, Ecosystem, Cyber-physical systems. If students want to enrich their skills and knowledge in various fields to make them employable, they must walk on the path of industry version 4.0 observing the concept of parallel learning.



Published by:

Shri. B. P. Deosarkar (HOD, ET)
Electronics and Comm. Engg.
Government Polytechnic Khamgaon

Edited By:

Shri. Rajeshwar G. Takwale (LET)
Electronics and Comm. Engg.
Government Polytechnic Khamgaon

For Private Circulation Only.

Disclaimer: Views, thoughts and opinion expressed in text belong solely to the authors and do not necessarily reflect the official policy of Electronics and Communication Engg. Department.