Department of Electronics and Communication Engineering

GOVERNMENT POLYTECHNIC KHAMGAON

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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 Electronic 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.

From Principal's Desk...



Dear Readers,

It gives me great pleasure to congratulate students, teachers and staff of Electronics & Communication Engineering Department, for the publication of this June, 20 edition of newsletter. I highly appreciate the commitment of faculty and staff of department towards academics during nationwide lockdown in response to the COVID-19 pandemic and response of their motivated

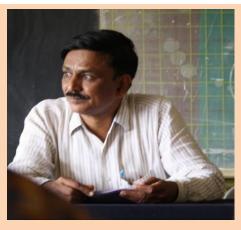
students. I also congratulate staff and faculty of ET department for uploading SAR document of NBA and hence I am very much confident that Electronics and Communication Engg. Department is not far away from the prestigious NBA accreditation. Finally, I wish best of luck for all the team members for future publication.

Dr. Sameer S. Prabhune

Principal

G. P. Khamgaon

From HOD's Desk...



Dear Readers,

It is jubilant moment to present this issue of newsletter. Many things happened over last month. Transformations brought in department will definitely provide better learning environment. I need to appreciate efforts of all faculty members and staff of the department taken in preparation of SAR and it's submission to NBA. Department is thankful to Shri. S R Soni, (LCE) for his follow up and Shri G V Umale for providing necessary support in carrying out civil work.

Dr. A. E. Dhole, Institute NBA coordinator needs special mention for his untired efforts in timely submission of SAR.

Shri. G. V. Umale, as an advisor in departmental PAQIC, was available whenever needed and his active participation and suggestions helped to improve quality of SAR. Motivation and support of head of the institute Dr. S. S. Prabhune acted as catalyst in expedition of work. Insistence of Hon. Joint Director Dr. D. V. Jadhav for NBA application and his constant encouragement and follow up maintained the momentum.

In the light of advisories from Government of India and Government of Maharashtra, all students, faculty and staff need to take necessary care to avoid spread of corona.

Shri. B. P. Deosarkar Head of Department Electronics & Comm. Engineering

From Editor's Desk...



Dear Readers,

It is indeed a great honour to be the Newsletter Editor for the Electronics and Communication Engg. Department and it is an immense pleasure to launch this edition for June 2020.

In this issue, we will recount the various projects and activities in which department is actively involved. Few points I would like to highlight here are, NBA preparation and SAR uploading, renovation of department, work and learn from home during nationwide lockdown in response to the COVID-19 pandemic.

Finally, huge thanks to Shri. Amey Patil Sir, Shri. Rajesh Mantri Sir, Shri. A. S. Kakad Sir who has contributed by writing, the wonderful, without which this newsletter issue wouldn't have been completed. Last but not least, I would like to thank Shri. B. P. Deosarkar (HOD, ET), Shri. S. A. Jumde (Co-Editor), for everlasting support throughout the creation of this edition.

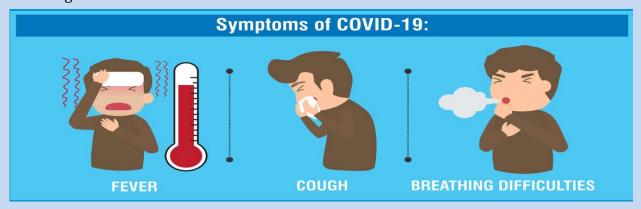
Shri. Rajeshwar Takwale

Lecturer, ET

Fight against CORONA

Dear students, In the wake of the COVID-19 outbreak, entire mankind across the globe is suffering. Till date there is no specific medicine is vailable. We all know that prevention is better than cure. While there is no medicine for COVID-19 as of now, it will be good take preventive measures which boost our immunity in these times. All are requested to follow the instructions stated below to fight against COVID-19.

Corona virus (COVID-19) is caused by Novel Corona Virus that leads to cough, fever or difficulty in breathing.

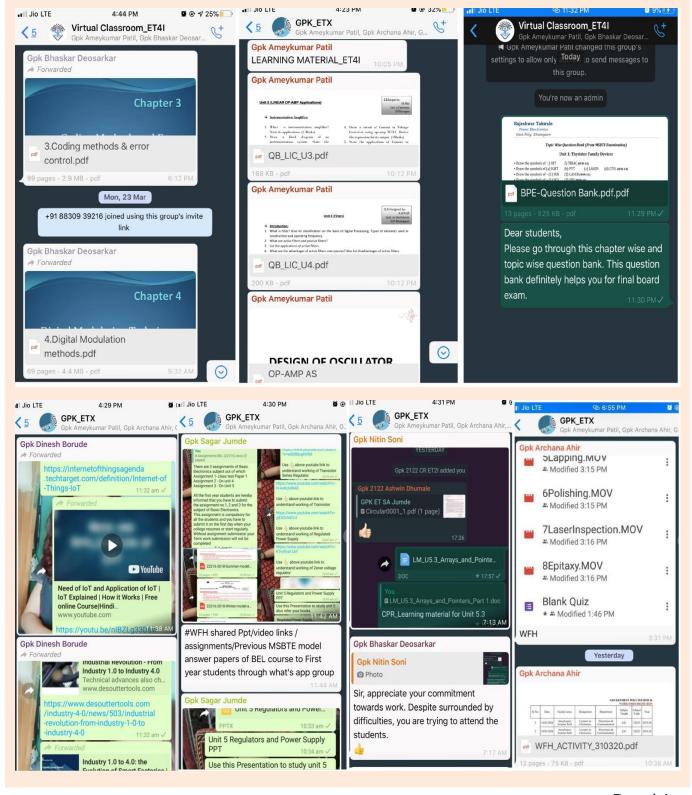


Take Precaution, Protect Yourself!!

- When coughing and sneezing, cover mouth and noise with handkerchief or tissue.
- Wash your hands regularly for 20 seconds, with soap and water or alcohol-based hand sanitizer.
- Keep distance and avoid close contact (1 meter or 3 feet). with anyone with fever, cough.
- Avoid touching your eyes, nose and mouth.
- Stay home and self-isolate from others in the household if you feel unwell.
- If you have fever, cough of difficulty in breathing with travel history from Coronavirus affected countries/areas or contact with suspected or confirmed COVID-19 patient, contact your nearest health facility center.

Work from Home, Learn from Home

As per instructions and the prohibitive steps to fight Corona (COVID19) pandemic, faculty in Technical institutes are expected to 'Work from Home' till 14th April, 2020 March. During Lock down, the normal regular T-L processes might have been slowed down. But fortunately, there are a lot of technical advanced solutions which can supplement the routine methodology. With this thought Head of Department Shri. B. P. Deosarkar had suggested many solutions starting with the idea of Creation of WhatsApp group and Google Classroom for transmitting learning materials assignments, MCQs, power point presentations, Question bank etc.



NBA - SAR Uploaded

On 16th March, 2020, Electronics and Communication Engineering Department successfully uploaded NBA-SAR (Self-Assessment Report) Document. Completed SAR document is a result of hard work done by staff and faulty of department under the leadership of our Head of Department Shri. B. P. Deosarkar Sir. Department of Electronics and Communication Engineering is not far away from the prestigious NBA accreditation.



Faculty Achievement

- Shri. B. P. Deosarkar worked as Chairman of "External Institute Monitoring Committee" appointed by MSBTE, Mumbai. His team conducted monitoring of two institute of Nagpur.
- Shri. Nitin Soni and Shri. Dinesh Borude worked as member of "External Institute Monitoring Committee" appointed by MSBTE, Mumbai.
- Shri. Rajeshwar Takwale worked as member of "Institute Closure Committee" appointed by MSBTE, Mumbai and JDRO, Amravati.
- Shri. Sagar Jumde has successfully completed four week online FDP on "Tools for online Teaching Learning Process" organized by Department of Pharmacy, Government polytechnic Jalgaon from April 20 to May 17, 2020 and online STTP on "MATLAB based Teaching-Learning in Mathematics, Science & Engineering" organized by Ramrao Adik Institute of Technology, Nerul, Navi Mumbai during 18th to 22nd May, 2020.
- Shri. Dinesh Borude has successfully completed one week online FDP on "Latest Wireless and Computing Technologies" during 14th to 18th April 2020, one week online FDP on "Low Power VLSI Design" during 20th to 24th April 2020, one week online FDP on "Academic Leadership Enhancement in Technical Institutions" during 04th to 08th May2020, one week online FDP on "8051 and its Applications" during 18th to 22nd May2020, all organized by Electronics and Communication Engineering Department, NITTTR Chandigarh.
- Mrs. Archana Ahir has successfully completed one week online FDP on "Computational Tools and Techniques MATLAB, ANSYS" during 27th to 01st May 2020, organized by Government College of Engineering, Karad and one week online FDP on "Python 3.4.3" during 19th to 23rd May 2020, organized by Government Polytechnic Awasari (Kh).

EIMC visit to Department

As per the policy of Maharashtra state Board of Technical Education, Mumbai, external academic and institute monitoring is carried out once in academic year. In this A.Y 2019-2020, External institute monitoring committee i.e. EIMC visited our institute and department on 6th March, 2020. Shri. S. R. Thute sir (Principle, G. P. Arvi) was the chairman of EIMC, while Shri. N. S. Sharma, Shri. R. P. Borudkar, Shri. M. N. Ranotkar were the members. EIMC team throughly observes the teaching learning process and NBA work done by department and also share their experience regarding NBA. At last EIMC team gave best wishes for the NBA Accreditation.

Department under Renovation

1. CCTV Installation:

To have vigilance of laboratory equipment and safety of students 08 CCTV cameras are installed which covers department entrance, lobbies and laboratories. At present a 16 channel DVR is deployed. In future with addition of cameras total department will be under surveillance.

2. Laboratory Extension:

Area of tow laboratories was less so these laboratories are extended by removal of partition walls and fixing of aluminum partition to meet the AICTE requirements.

3. Faculty Cabin Partition:

To have better control over laboratory environment and functioning, it was decided to have seating arrangement of in charge in laboratory itself, accordingly separate aluminum partitioned cabins are fabricated and fixed in laboratories. This is also useful in maintaining physical distancing in Covid-19 Pandemic. Such arrangement of seating is being made available to five faculties and Head of department. Separate cabin and store arrangement is done for technical lab assistant to facilitate issue/receipt of equipment and consumables.











Shining Alumni:

Ku. Supriya A. Thakare

Topper!!!



Our alumni keep legacy of excellence at each and every stage of academics. Let us meet one of our shining alumni Ku. Supriya Ashok Thakare. Supriya had passed diploma in Electronics & Communication Engineering in 2020-2013 with 85.43%. She completed her graduation from Shri Sant Gajanan Maharaj College of Engineering, Shegaon with 8.24 CGPA.

As outstanding always, she had completed M. E. from SSGMCE, Shegaon with CGPA of 8.74 and gained *Second Order of Merit* in *Sant Gadge Baba, Amravati University*. Currently she is working as guest lecturer in our department.

Mahesh Shrikrushna Kholgade

"An Entrepreneur"

"As long as you're going to be thinking, think big"



Let's meet to "An Entrepreneur" Mahesh Shrikrushna Kholgade, a boy from rural area of Hingana Balapur in Tq. Jalgaon Jamod. He completed his diploma in Electronics and Comm. Engg. in 2013 and graduation from PLITMS, Buldana.

After completion of education he went to Aurangabad for job search. Upon failed, he left idea of doing job. Inspiring from his friend Chaitali, now he decides that *Don't do the Job, Give the Job!*. Pursuing his idea, he along with his partner visited LED lights making company at Indore. Finally, on the basis of practical knowledge gained in Diploma and Degree education, he and his partner Akshay

Wagh decided to establish the start-up company named, **M/s Cammpus Electricals, Nandura.** They raise fund of about 4, 00,000/- for machinery, row materials, labor charges etc.

Product range of his company includes Street Lights, Flood Lights, LED Bulbs, Solar Street Lights, 3 Phase Auto Switch. His company's target customers are small retailers, end user and also Gram Panchyayat of nearby area. They adopt different marketing strategies like mouth-to-mouth publicity, through Tenders, visit to customers, through social media. M/s Cammpus Electricals, Nandura has annual turnover in recent economic years is 19, 50,000/-(for 2018-19) and 45,31,000/- (for 2019-20).

Department of Electronics and Comm. Engg. wishing him best luck for his future endeavor.



TPO TAKLS:



Dear Readers, Hope all of you are good !!!

The training and Placement Cell is one of the integral part of our institute. The T &P Cell works diligently to provide place for students in the industrial world. Here, I took this opportunity to let you know what we did in last two years with the help of my cell members and the support of our principal. TPO cell works in the following area:

- Placement activities for final year students.
- 6 week Industrial Training for students at the end of 4th Sem.
- Organization of motivational, Personality Development and Industrial Expert Lectures Industrial Visits.
- Staff Training

In A.Y 2018-2019, we have call 08 companies and offer 159 jobs to interested students of all branches. In A.Y 2019-2020, till (before lockdown) 06 companies visited to our institute and shortlist 88 students Yet some companies are in pipeline, after this covid-19 lockdown period we will resume to task.

Six week Industrial Training at the end of 4th semester may need to restructure as per guidelines laid by MSBTE. Hope all the departments will emerge with new ideas and concept to fulfill this curriculum requirement. Along with placement, Institute is having 33 active MOU's with various industries and construction companies in local region.

Thanks !!!

Shri. A. S. Kakad

LME and Training & Placement Officer Government Polytechnic, Khamgaon

Faculty Speaks:

10 HABITS TO BECOME AN EFFECTIVE STUDENT!!!



The key to becoming an effective student is learning how to study smarter, not harder. This becomes more and more true as you advance in your education. So if you want to become a successful student, don't get discouraged, don't give up, just work to develop each of the study habits below and you'll see your grades go up, your knowledge increase, and your ability to learn and assimilate information improve.

- 1. Do not attempt to cram all your studying into one session
- Successful students typically space their work out over shorter

periods of time and rarely try to cram all of their studying into just one or two sessions. If you want to become a successful student then you need to learn to be consistent in your studies and to have regular, yet shorter, study periods.

- **2. Plan when you're going to study -** Successful students schedule specific times throughout the week when they are going to study & then they stick with their schedule & you get a time to review your courses will ensure you develop habits that will enable you to success in education.
- **3. Study at the same time -** Not only is it important that you plan when you're going to study, it's also important you to create a consistent, daily study routine, then that will become a regular part of your life. You'll be mentally and emotionally more prepared for each study session and each study session will become more productive.
- **4. Each study time should have a specific goal -** Simply studying without direction is not effective. You need to know exactly what you need to accomplish during each study session.
- **5. Never procrastinate your planned study session -** It's very easy, and common, to put off your study session because of lack of interest in the subject, because you have other things you need to get done, or just because the assignment is hard. Successful students DO NOT procrastinate studying because then that will become much less effective and you may not get everything accomplished that you need to.
- **6. Start with the most difficult subject first -** As your most difficult assignment or subject will require the most effort and mental energy, you should start with it first. Believe it or not, starting with the most difficult subject will greatly improve the effectiveness of your study sessions, and your academic performance.
- **7. Always review your notes before starting an assignment -** Before you start each study session, and before you start a particular assignment, review your notes thoroughly to make sure you know how to complete the assignment correctly. Reviewing your notes before each study session will help you remember important subject matter learned during the day, and make sure your studying is targeted and effective.
- **8. Make sure you're not distracted while you're studying -** Everyone gets distracted by something. Maybe by TV, Radio or Mobile Phone or may be family members, will lead to very ineffective studying. So, before you start studying find a place where you won't be disturbed or distracted.
- **9. Use study groups effectively -** Studying in groups enables you to get help from others when you're struggling to understand a concept, complete assignments more quickly, and teach others, whereby helping both the other students and yourself to internalize the subject matter.

10. Review your notes, schoolwork and other class materials over the weekend - Successful students review what they've learned during the week over the weekend. This way they're well prepared to continue learning new concepts that build upon previous coursework and knowledge acquired in the previous week.

We're confident that if you'll develop the habits outlined above that you'll see a major improvement in your academic success.

Shri. Rajesh Mantri

Lecturer in Mechanical Engg. Department Government Polytechnic, Khamgaon

Mindfulness and Meditation...



Mindfulness can be described as the practice of paying attention in the present moment, and doing it intentionally and with non-judgment. Mindfulness meditation practices refer to the deliberate acts of regulating attention through the observation of thoughts, emotions and body states. Typical mindfulness activities include:

- Mindful non-judgmental awareness of breath, body, feelings, emotions and/or thoughts (in sitting meditation practice or throughout the day)
- Mindful walking meditation
- Mindful body scans in a sitting or lying down position
- Mindful eating
- Listening with non-judgment.

What can mindfulness do for students?

- **Reduced Stress**: Improved ability to manage stress.
- **Increased Focus:** Improved ability to pay attention, focus and concentrate.
- Improved Emotion Regulation: Reduced impulsiveness, improved child behavior.
- Increased Emotional Intelligence: Improved conflict resolution skills
- Increased Empathy and Respect: Increased empathy and understanding of others
- Increased Resilience: Increased capacity to overcome challenges
- Improved Physical Well-being: Increased engagement in physical activity
- Improved Creativity & Collaboration: Improved expression of creative arts.

Students will find it much easier to focus and actively engage in the classroom. The class will benefit as a whole from a collective calm. These skills can also be applied to maturely navigate challenging peer or family interactions. Students will be less likely to abuse others, and those students who are abuse will be more resilient. Students are also less likely to engage in high-risk behaviors as they will be calmer and less reactive.

What can mindfulness do for teachers?

- Reduced stress and burnout (and reduced absenteeism from stress and burnout related conditions)
 Improved learning conditions
- More easily managed classrooms Positive bilateral teacher-student relationships. Teachers will be able to spend more time teaching and less time managing the classroom and also be better equipped to handle the stresses of work. Teachers teaching students that are practicing mindfulness will also find students to be better mentally equipped to learn.

How to practice Mindfulness meditation?

Simple meditation technique which can be suggested for the beginners is the *Anapana Meditation*. Anapana means observation of natural, normal respiration, as it comes in and as it goes out. It is an easy to learn, objective and scientific technique that helps to develop concentration of the mind. It can be practiced in following steps-

- **Step1:-** Select any silent environment free from noise or disturbances for practicing meditation. Before starting the meditation, set a timer in your mobile or watch for 10 minutes. So that at end this 10 minutes session of silence one can be alerted.
- **Step2:-** Sit in comfortable position (cross leg position or normal seating position) on a mat with waist, spine and neck in straight position.
- **Step3:-** Close your eyes. Concentrate your mind on the area below the nostrils and above the upper lips and observe the natural respiration i.e. inhalation and exhalation of the breath.
- **Step4:-** Do not control the breath as like in Pranayama. Pranayama is different process involving manipulation of breathing whereas anapana is just observation of respiration in its natural rhythm.
- **Step5:-** When one observes respiration, one begins to understand the nature of the mind. The mind never stays in the present moment, constantly tries to escape into a past or future that is unattainable. But we have to focus our mind again and again to the area below the nostrils and above the upper lips when it deviates. Thus just observe the incoming and outgoing breath.
- **Step6:-** Mind deviates repeatedly, floods with different thoughts but always remember that it is nature of our mind which do not remain in present so we have change the habit pattern of our mind to focus on the limited area. If it is observed that mind do not focuses on the area then take a breath with little faster speed and once mind becomes stable, follow the natural rhythm of breath just by observing incoming and outgoing breath.
- **Step7:-** Do it for 10 minutes. As timer beeps, open your eyes.

10 minutes Guided Anapana meditation is also available on you tube https://www.youtube.com/watch?v=mAtSluTSx90. You can follow the instruction and practice it. It is good to practice this meditation at least two times a day (morning and evening) for 10 minutes.

May all get benefitted from this!!!
May all beings be happy and peaceful!!!

Shri. Ameykumar A. Patil

Lecturer in Electronics & Comm. Engg. Dept. Government Polytechnic, Khamgaon

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