

Department of Electrical Engineering

GOVERNMENT POLYTECHNIC KHAMGAON

(Under Directorate of technical Education, Maharashtra Government)



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VISION:

“To impart quality and value based education to recognize technical professional in field of electrical Engg ”

MISSION:

Department of Electrical Engineering is Committed to:

- M1.** To produce engineers with essential knowledge, technical skills and ethical values to serve the society and nation.
- M2.** To develop globally competent professionals in electrical engineering.
- M3.** To impart training, Research, Entrepreneurship abilities and skills to have all round development of students
- M4.** To provide best possible practices to encourage the students to be a lifelong learner

PROGRAM EDUCATIONAL OBJECTIVES (PEOS):

- **PEO1:** Provide socially responsible, environment friendly solutions to Electrical engineering related broad-based problems adapting professional ethics.
- **PEO2:** Adapt state of the Electrical 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 Electrical 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.

Dr. Sameer S. Prabhune
Principal
G. P. Khamgaon

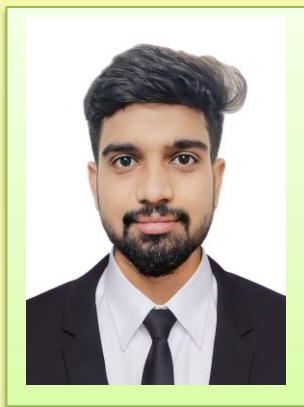
From HOD's Desk...



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

Up gradation of facilities and avenues for overall development.

Shri. M.W.Mundhada
I/C Head of Department
Electrical Engineering



Dear Readers,

It is indeed a great honour to be the Newsletter Editor for the Electrical Engineering Department and it is an immense pleasure to launch this edition for AY 2020-21.

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 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. M.W.Mundhada (I/C HOD, EE), All Electrical department lecturer for ever lasting support throughout the creation of this edition.

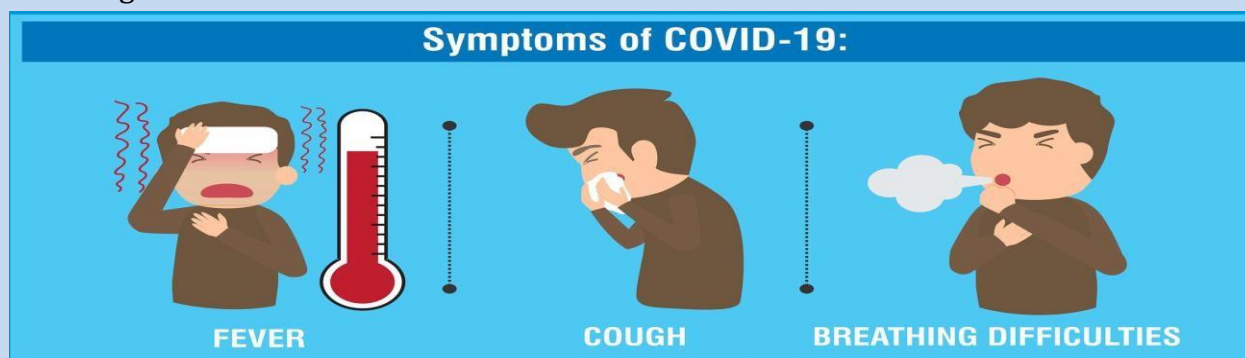
Chetan .D. Patil

News letter coordinator

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 available. 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.

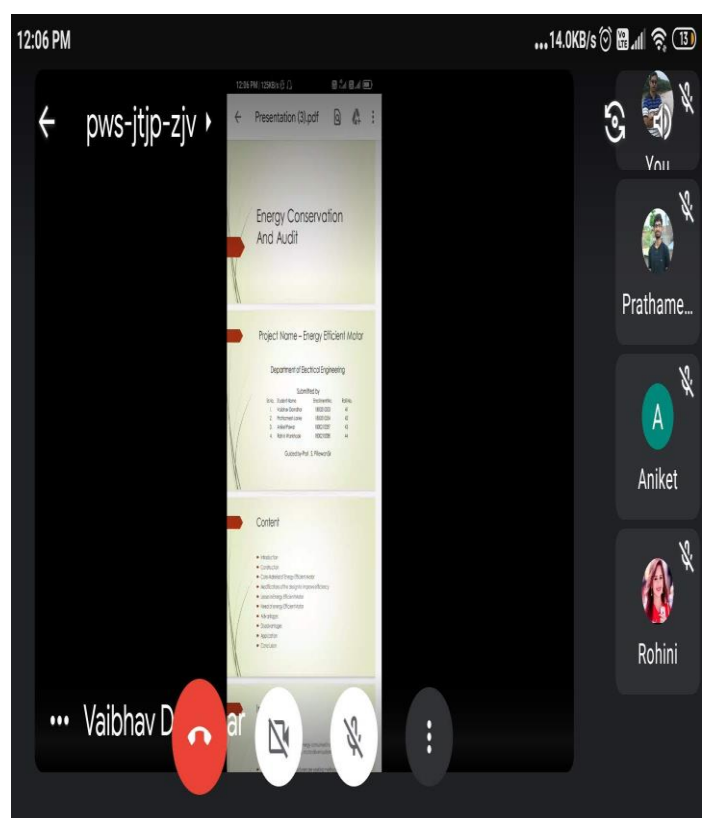
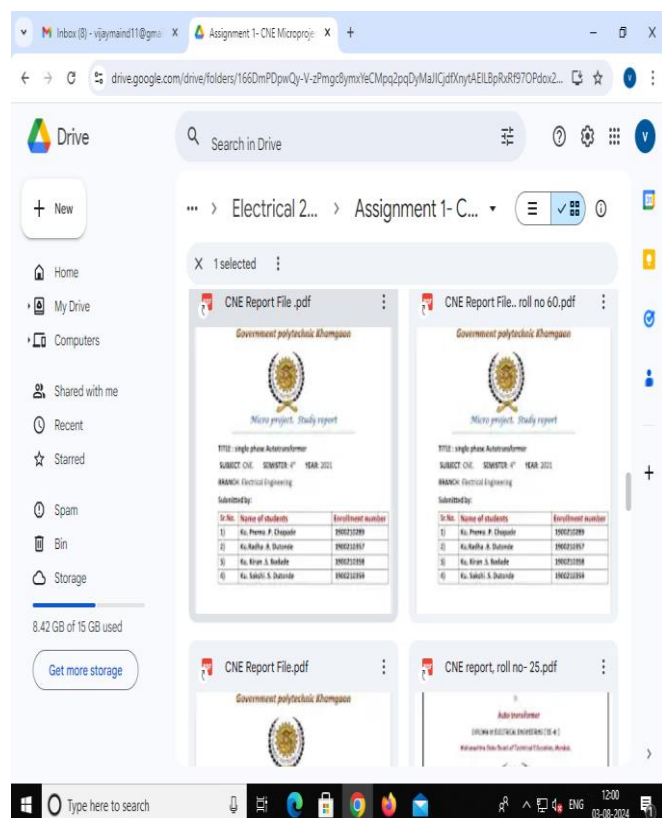
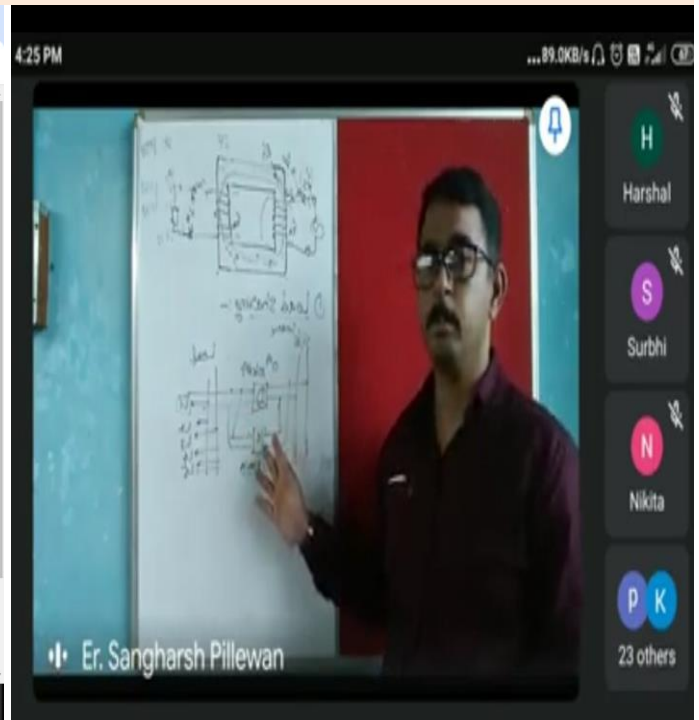
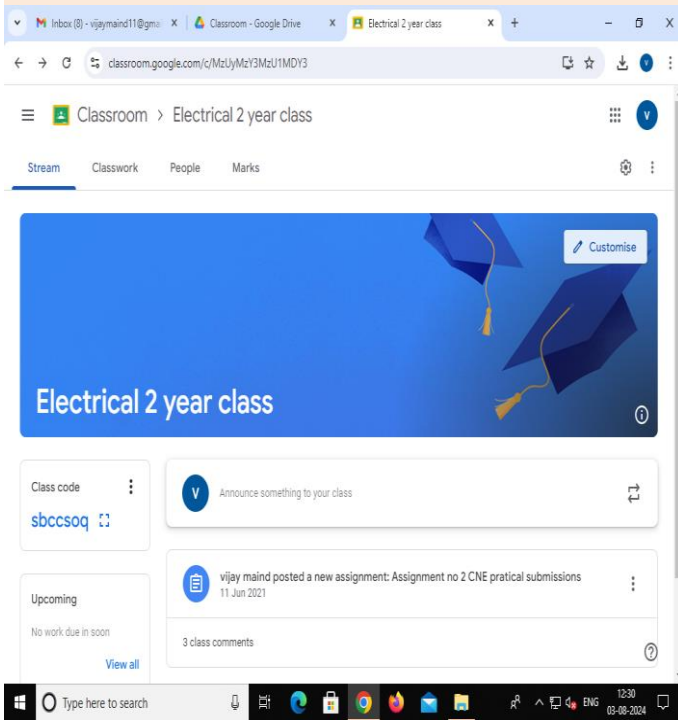


Take Precaution, Protect Yourself!!

- When coughing and sneezing, cover mouth and nose 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 or 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. M.J Mundhada 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.



Faculty Achievement

- Shri. M. W. Mundhada worked as member of ***“External Institute Monitoring Committee”*** appointed by MSBTE, Mumbai. His team conducted monitoring of two institute of Amravti.
- Shri. Vijay Maind and Shri. Mahendra Bagde worked as member of ***“External Institute Monitoring Committee”*** appointed by MSBTE, Mumbai.
- Shri. Satish Chakor has successfully completed Industrial Training Program on ***“LV switchgear and their application ”*** during 27 to 31 Jan 2020 organized by L&T (STC) Pune.
- Shri. Mahendra Bagde has successfully Publish Paper in International journal of Emerging Technology and Advanced Engineering on ***“Sketches Matching with Digital Face Images using (EUCLBP)Extended Uniform circular Local Binary Pattern Algorithm”*** from February 2019 and online one week TEQUIP-3 on ***“Resurch opportunities in Electrical Engineering”*** organized by Government College of Engineering, Karad during 07 to 16 May, 2020.
- Shri. Vijay Maind has successfully completed Two week online FDP on ***“Resurch opportunities in Electrical Engineering”*** during 15 to 21 May 2020, organized by Government College of Engineering, Karad and one week FDP on ***“National Level online FDP on Effective use of ICT tools in teaching learning process”*** during 8 to 12 Jun 2020, organized by Government polytechnic Malvan..
- Mrs. Reshmi Bharsakle has successfully completed one week online FDP on ***“Signal image and videos processing a practical approch”*** during 26th to 30st May 2020, organized by Government College of Engineering, Karad and one week online FDP on ***“Scilab”*** during 12th to 16rd Jun 2020, organized by Amrutvahini Polytechnic, Sangamner.

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 04 CCTV cameras are installed which covers department entrance, lobbies and laboratories. At present a 08 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 Six 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:-



Dear Students

I am delighted to introduce a remarkable alumnus from our Batch of 2016, MAHESH RANE. Reflecting on their journey, it is clear how their dedication and hard work during their time here have significantly shaped their successful career.

After completing their diploma with us in 2016 he pursued an engineering degree at DY Patil College, Pune. This solid foundation led them to further their education at Brunel University London, where he earned an Masters of Science in Advanced Electronics and Electricals.

Today, Mahesh is making significant strides as a Project Engineer in Advanced Robotics and Sustainable Operations and Development in London. Each day, they push the boundaries of technology and contribute to creating sustainable solutions for the future.

He is message our current students:- **Embodies the spirit of Embracing challenges, Constant Innovation, and Lifelong Learning.** The knowledge and experiences you gain here are the Stepping Stones to your future success. Your journey starts here, and the world awaits your brilliance.

We wish Mahesh Rane a continued success and all the best in their endeavors.

Mr.Vijay.A.Maind
Lecturer in EE Department
Government Polytechnic, Khamgaon

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 abused 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.
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