Volume: 1

Academic Year: 2024-25

Krantiveer Vasantrao Narayanrao Naik Shikshan Prasarak Sanstha

LOKNETE GOPINATHJI MUNDE INSTITUTE OF ENGINEERING EDUCATION & RESEARCH,

Approved by AICTE, Accredited by NAAC

Krantiveer Vasantrao Naik Marg, Canada Corner, Nashik, 422002

DEPARTMENT OF CIVIL ENGINEERING

PRAGATI – BIANNUAL NEWSLETTER

JUNE 2024 - MAY 2025

MESSAGE FROM THE PRINCIPAL

"Education is not just about learning facts;
it's about training minds to think, innovate, and lead."

It brings me immense pride and joy to witness the release of PRAGATI, the magazine of the Department of Civil Engineering. This publication is more than just a record of events. It is a vibrant reflection of the creativity, technical excellence, and teamwork that our students and faculty consistently demonstrate.

In an era where civil engineering continues to evolve rapidly, it is heartening to see our students not only keep pace but lead through innovation, whether it's through cutting-edge technologies like 3D printing or sustainable infrastructure solutions.

I commend the department for nurturing a culture of curiosity and continuous learning. May this magazine continue to inspire, inform, and ignite new ideas in the minds of readers.

Congratulations to the editorial team, faculty, and all contributors for making PRAGATI a beacon of academic and professional spirit.

With best wishes for future editions,

Dr. K.V. Chandratre

Principal, LoGMIEER

Volume: 1 Academic Year: 2024-25

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DEPARTMENT OF CIVIL ENGINEERING
PRAGATI – ANNUAL NEWSLETTER

JUNE 2024 - MAY 2025

FROM THE DESK OF HOD

“Build the future one layer at a time.”

It gives me immense pleasure to present the Civil Engineering Department's biannual newsletter PRAGATI. Our department continues to make significant strides in both academics and industry collaboration. With a blend of experienced and young faculty, we focus on shaping competent civil engineers who are ready to meet the challenges of modern infrastructure development.

Our students have participated in numerous academic and technical initiatives. We take pride in our laboratory infrastructure, project-based learning approach, and commitment to sustainability and innovation.

I congratulate the editorial team and contributors for their hard work in bringing this edition to life. I am confident that PRAGATI will continue to inspire our students to strive for excellence, uphold professional values, and contribute meaningfully to the field of civil engineering.

Warm regards,
Dr.S.R.Baviskar
Head of the Department,
Civil Engineering

Volume: 1 Academic Year: 2024-25

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DEPARTMENT OF CIVIL ENGINEERING

PRAGATI – BIANNUAL NEWSLETTER

JUNE 2024 - MAY 2025

DEPARTMENT HIGHLIGHTS

The department has ready infrastructures like Laboratories, Classrooms, Experienced Faculties and Learning Environment to impart the necessary training to the Students through class rooms, laboratories and site visits. We assure this will go long way with the career of our students. The Department of Civil Engineering at LoGMIEER at Nashik is nurturing high quality technical manpower required by various industrial establishments, R&D organizations, Govt. & public establishments and academic institutions. The Department offers B .E. degree in Civil Engineering. The Department encourages its students to engage in extra-curricular and co-curricular activities, essential for development, nurturing of team spirit, and developing organizational skills. The faculty members of the department are involved in research activities and they continue to encourage the academics in Students.

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PRAGATI – BIANNUAL NEWSLETTER

JUNE 2024 - MAY 2025

VISION

To Excel in the field of Civil Engineering by developing competent engineers for well-being of industry and society

MISSION

- To impart quality education through an Effective teaching learning process.
- To provide best facilities and an inclusive environment that encourages participation in co-curricular and extra-curricular activities for professional development of the students.
- To cultivate expertise in new and evolving engineering domains, ensuring the all-round development of students.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

- PEO1: Plan, design, analyse, construct, and manage civil engineering systems.
- PEO2: Pursue advanced level studies.
- PEO3: Pursue professional membership and certification.
- PEO4: To produce graduates who are prepared for life-long learning and successful careers as civil engineers.

Volume: 1 Academic Year: 2024-25

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PRAGATI – BIANNUAL NEWSLETTER

JUNE 2024 - MAY 2025

FACULTY PROFILE

Sr. No.	Faculty	Designation	Qualification	Experience (years)
1	Prof.(Dr.)Baviskar Shrikant R.	H.O.D & Asst.Professor	PhD, ME (Construction Tech & Mgmt)	18
2	Prof.(Dr.) Kamthekar L. K.	Asst.Professor	PhD, M Tech (Civil Water Management)	14
3	Prof. Bodke Sandeep S.	Dean Infra & Asst.Professor	M Tech (Housing)	17
4	Prof. Deore Yogesh D.	Asst.Professor	M E (Structures)	12
5	Prof. Boraste Anurag V.	Asst.Professor	M E (Constn Mgmt)	8
6	Prof. Bande Kiran B.	Asst.Professor	M E (Constn Mgmt)	9
7	Prof.Gupta Milind R.	Asst.Professor	M E (Structures)	7
8	Prof.Bodke Purnima S.	Asst.Professor	M E (Transportation Engg)	3
9	Prof.Gamane Ankush K.	Asst.Professor	M E (Constn Mgmt)	2
10	Prof.Patil Nishigandha R.	Asst.Professor	M E (Constn Mgmt)	1
11	Prof.Pawar Varsha	Asst.Professor	Msc. Geology	2

FACULTY ACHIEVEMENTS

NPTEL COURSES

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

ANURAG VILAS BORASTE

for successfully completing the course

Python for Data Science

TOPPER 5%

with a consolidated score of **85** %

Online Assignments	23.92/25	Proctored Exam	60.94/75

Total number of candidates certified in this course: **15251**

Prof. Andrew Thangaraj
Chair
Centre for Outreach and Digital Education, IITM

Jan-Feb 2025
(4 week course)

Prof. Vignesh Muthuvijayan
NPTEL Coordinator
IIT Madras

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

MILIND ROHTASH GUPTA

for successfully completing the course

Introduction to Civil Engineering Profession

TOPPER 5%

with a consolidated score of **80** %

Online Assignments	23.33/25	Proctored Exam	57/75

Total number of candidates certified in this course: **1686**

Prof. Andrew Thangaraj
Chair
Centre for Outreach and Digital Education, IITM

Jan-Mar 2025
(8 week course)

Prof. Vignesh Muthuvijayan
NPTEL Coordinator
IIT Madras

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

BANDE KIRAN BHANUDAS

for successfully completing the course

Geotechnical Engineering - 1

with a consolidated score of **66** %

Online Assignments	21.06/25	Proctored Exam	45/75

Total number of candidates certified in this course: **108**

Jan-Apr 2025
(12 week course)

Prof. Sridhar Iyer
Head CDEEP & NPTEL Coordinator
IIT Bombay

CESA (CIVIL ENGINEERING STUDENTS' ASSOCIATION)

Inauguration of CESA Banner by Dr.K.V.Chandratre, Principal, LOGMIEER

The Civil Engineering Students Association (CESA) is a student-centric organization dedicated to fostering collaboration, innovation, and leadership among civil engineering students. CESA serves as a dynamic platform where students can enhance their technical expertise, develop essential soft skills, and participate in a wide range of extracurricular and co-curricular activities.

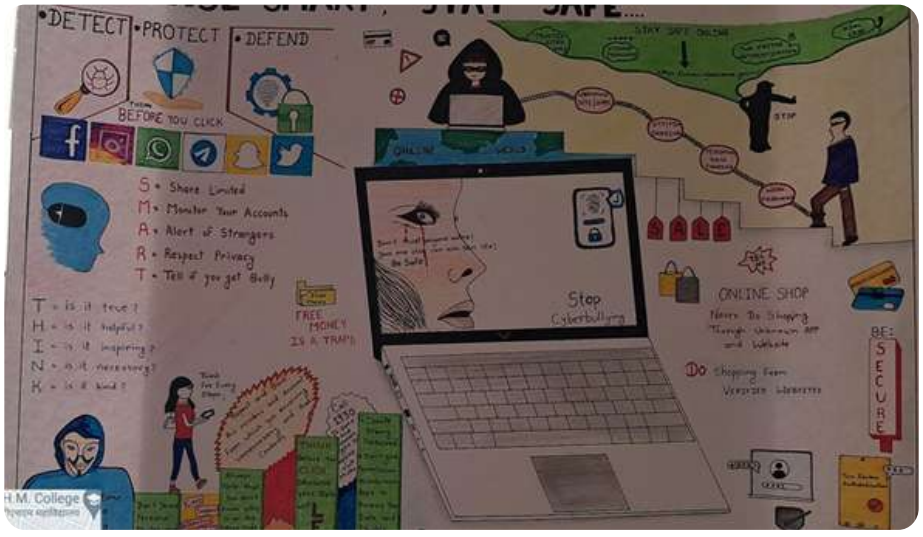
- **Objectives of CESA:**
  - Promote Technical Excellence
  - Encourage Practical Learning
  - Develop Leadership and Teamwork Skills
  - Bridge the Gap Between Academia and Industry
  - Nurture Innovation and Creativity
  - Promote Networking and Collaboration
  - Support Holistic Development
  - Encourage Social Responsibility
  - Foster Extracurricular Engagement
  - Celebrate Civil Engineering

Civil Engineering Students Association (CESA) AY 2024-25

Name of Member	Designation
Narendra Pandit Bachhav	President
Anmol Birchand pandit	Vice-President
Tanmay Sandip pawar	Secretary
Lokhande Pradip Balu Join	Secretary
Khatavkar Mrunali Mangesh	Ladies Representative
Ahire Sushmita Ratnakar	Ladies Representative
Apurva Jitendra Wagh	Council Member (BE)
Avhad Shruti Sanjay	Council Member (BE)
Prachi Atmaram Patil	Council Member (TE)
Bendkule Vishakha Shantaram	Council Member (TE)
Deore Sakshi Kailas	Council Member (SE)
Bahiram Kajal Ambadas	Council Member (SE)

CESA ACTIVITIES

POSTER COMPETITION



The event organised by the Department of Civil Engineering on 18-02-2025, featured a poster competition on “Innovation and Entrepreneurship”, aimed at inspiring participants to think creatively and develop innovative solutions to real-world challenges.

Through visually compelling posters, students showcased unique ideas, start-up concepts, and entrepreneurial ventures. The competition encouraged critical thinking, problem-solving, and effective communication, fostering a spirit of innovation and business acumen.

First Prize: Kajal Sanjay Ghuge (F.E. Civil)
Second Prize: Garate Himangi Kashinath (T.E.Civil)

CESA ACTIVITIES

>>> BE STUDENTS FAREWELL 2024-25

As per the tradition of every year, CESA takes pride in organizing a heartfelt farewell party for our beloved BE students.

This occasion is not just a celebration but also a moment to honor your journey, achievements, and unforgettable memories in the department.

Wishing you all the very best for a bright and successful future.

Once a CESA family member, always a CESA family member!

PROGRAMS & ACTIVITIES

SITE VISIT

The Second Year Civil Engineering students visited the RMC Plant at Designer Concrete Pvt. Ltd., Nashik, on 12th April 2025. The visit provided insights into the manufacturing process, quality control measures, and applications of ready-mix concrete in construction projects.

Final Year Civil Engineering students visited the Cross Drainage Work site near KK Wagh Engineering College, Nashik, on 12th April 2025. The visit offered practical exposure to design, construction techniques, and the importance of cross drainage structures in water management projects.

To provide students with practical knowledge of cross drainage structure design and construction, enhance understanding of its role in irrigation and water management systems, and bridge the gap between theoretical concepts and real-world applications.

PROGRAMS & ACTIVITIES

SITE VISIT

Final Year Civil Engineering students visited the Vaitarna Gravity Dam on 7th April 2025. The visit enabled students to understand the design principles, structural components, and construction techniques of gravity dams, along with their role in water storage and management.

Third Year Civil Engineering students participated in a technical site visit to an under-construction building on 27th March 2025. The visit offered hands-on exposure to building construction processes, site management practices, and the implementation of safety measures.

The visit aimed to enhance their understanding of modern construction techniques, equipment, and materials, while familiarizing them with site layout planning and execution.

PROGRAMS & ACTIVITIES

SITE VISIT

A technical site visit to an under-construction building was organized for BE Civil students on 21/04/2025.

The purpose of the visit was to provide practical exposure and enhance understanding of the Bar Bending Schedule (BBS), which is an essential aspect of reinforcement detailing in construction projects.

Third Year Civil Engineering students visited the Sewage Treatment Plant on 23rd March 2025. The visit offered insights into the working principles, treatment processes, and operational management of sewage treatment facilities, highlighting their importance in environmental engineering and public health.

To provide students with practical exposure to sewage treatment processes, familiarize them with various treatment units and their functions, and relate theoretical knowledge of environmental engineering to real-life applications.

EXPERT LECTURE

CIVIL ENGINEER'S ROLE AS PROJECT MANAGER

An expert lecture on “Civil Engineer's Role as Project Manager” was delivered by Er. Aniket Agrawal, Founder of Grow High Engineers, on 30th September 2024. The session aimed to provide students with valuable insights into the evolving responsibilities of civil engineers in project management roles. Key topics covered included project planning and scheduling, risk management, communication skills, and coordination.

Er. Agrawal emphasized the importance of combining technical knowledge with effective execution strategies to ensure that construction projects are completed on time, within budget, and up to quality standards.

The lecture served as an excellent opportunity for aspiring engineers to understand the managerial and leadership skills essential for success in today’s construction industry. A total of 53 students attended the session.

EXPERT LECTURE

WASTE WATER ENGINEERING

A guest lecture on "Waste Water Engineering: Basic Concepts and Its Application" was conducted on 05/03/2025 from 1.00 pm to 3.00 pm. The session was delivered by Prof. Prakash Laxman Pathak, Assistant Professor at K. K. Wagh Institute of Engineering Education and Research, Nashik.

It was organized by Dr. Lata K. Kamthekar, Assistant Professor, Department of Civil Engineering. The objective of the session was to enhance students' understanding of wastewater engineering and to introduce them to recent trends and applications in government and private sectors. The session was informative and helped students gain practical insights into the real-world relevance and career prospects in this field.

EXPERT LECTURE

RESOURCE MANAGEMENT AT CONSTRUCTION SITE

On September 6, 2024, Er. Nilesh Chauhan, Founder of DC Construction, delivered an expert lecture on "Resource Management at Construction Site" to 28 Civil Engineering students at Loknete Gopinathji Munde Institute of Engineering Education & Research, Nashik.

The lecture, held from 10:30 AM to 12:00 PM, aimed to enhance students' understanding of managing men, materials, and machines in construction.

Key discussion areas included material, labor, and time management, emphasizing their importance for timely, budget-conscious, and quality project completion. Feedback forms indicated high satisfaction with the session's objectives, the expert's interaction, and the overall improvement in knowledge.

VALUE ADDED COURSES

MICROSOFT PROJECT WORKSHOP

A five-day "Hands-on Training on Microsoft Project" workshop was conducted by the Department of Civil Engineering at Loknete Gopinathji Munde Institute of Engineering Education & Research from 14th to 18th October, 2024.

Mrs. Shital M. Wagh from CADD Centre, Nashik, served as the resource person. The workshop's objective was to equip 29 TE Civil students with practical skills in project planning, management, and tracking using Microsoft Project.

The curriculum covered essential aspects like task relationships, calendar creation, Work Breakdown Structure, resource analysis, and report generation. The training aimed to empower participants to confidently plan, execute, and control projects. Feedback indicated the workshop was highly beneficial and improved participants' skills for effective project management.

VALUE ADDED COURSES

HANDS-ON TRAINING ON AUTOCAD

The Department of Civil Engineering at Loknete Gopinathji Munde Institute of Engineering Education & Research organized a one-week "Hands-on Training on AutoCAD" workshop from April 11th to April 17th, 2025.

This workshop, conducted by Preeti Rahul Patil from Alaska Software Training Hub, Nashik, targeted SE Civil students, with 45 participants.

The training focused on basic to advanced AutoCAD techniques, including drawing commands, modification, annotation, layer management, and building plan preparation, directly enhancing participants' proficiency in using a modern engineering tool.

PLACEMENTS

Felicitation of Civil Department alumnus of A.Y 2024-25 placed as Structural Engineering in Prothious Engineering Service

Felicitation of Civil Department alumnus of A.Y 2024-25 placed as Junior Engineering in ABL Infrastructure Pvt Ltd

PLACEMENTS

Felicitation of Civil Department alumnus of A.Y 2024-25 placed as Civil Engineer Assistant at Nagpur Municipal Corporation

Felicitation of Civil Department alumnus of A.Y 2024-25 placed as Quality Engineer in Shreepad Construction

FELICITATION OF DISTINGUISHED ALUMNI

FELICITATION OF DISTINGUISHED ALUMNI

As part of the alumni meet 2k25, LOGMIEER proudly felicitated its Distinguished Alumni Mr.Sachin Chauhan (Alumni of Civil Engg Batch 2019-20) on 23rd Jan 2025. The event recognized the outstanding achievements and contributions of alumni who have brought honor to the institution through their professional excellence, innovation, and service to society.

ALUMNI STUDENT INTERACTION

An Alumni-Student Interaction program was successfully organized at the department of Civil Engineering on 23rd Jan 2025, aimed at bridging the gap between current students and alumni. The event served as an inspiring platform for knowledge sharing, career guidance, and networking.

LOGMIEER TECHFEST 2K25

TREASURE HUNT EVENT

The event was organised as a part of LOGMIEER Techfest 2K25 on 01-03-2025, featured a Technical Treasure Hunt Competition to enhance problem-solving, teamwork, and technical skills through engaging puzzles.

It promoted quick thinking, time management, and practical knowledge application in a fun and competitive environment. Among 23 Groups which participated in the event, top-performing teams were rewarded.

First Place: Amol Sadgir & Kunal Ipar (S.E. Civil)
Second Place: Aniket Amare & Anjali Khanande (T.E. Civil)

LOGMIEER TECHFEST 2K25

PROJECT COMPETITION

The Project Competition – LOGMIEER was organized as part of TECHFEST 2K25 on 01/03/2025 from 10:30 AM to 5:00 PM. The event aimed to promote innovation and sustainable solutions for real-world infrastructure challenges in civil engineering.

A total of 38 participants showcased projects spanning structural design, disaster resilience, smart infrastructure, and sustainable construction. The competition was judged by Prof. S.B. Kajabe, HoD, Civil Engineering, JIT Nashik. Students demonstrated creativity, teamwork, and technical excellence.

Winners from MET BKC COE, Nashik, impressed with projects that addressed pressing environmental and engineering issues.

STUDENT ARTICLES

3D PRINTING: REVOLUTIONIZING CIVIL ENGINEERING

Civil engineering is entering a new era, where speed, sustainability, and smart construction matter more than ever. One of the most exciting technologies transforming the way we build is 3D Printing — also known as Additive Manufacturing.

It's no longer just for small plastic models. Today, 3D printing is building homes, bridges, and even disaster shelters — faster, cheaper, and with less waste. This innovation has the potential to redefine how we think about construction.

- **What is 3D Printing in Construction?**
  - 3D printing in civil engineering involves layer-by-layer deposition of construction material, usually a special concrete mix, directly from a digital model. The printer acts like a giant robotic arm, controlled by software, to follow a precise path and create walls, slabs, and even entire structures without formwork or manual labor.

- Benefits of 3D Printing in Civil Engineering
  - Speed: Structures can be printed within hours or days, compared to weeks in conventional construction.
  - Cost-Effective: Reduced labor, less waste, and optimized material usage make it cheaper.
  - Design Freedom: Complex and organic shapes can be built easily — enabling creative architecture.
  - Sustainability: Less waste, less water usage, and scope for recycled materials contribute to greener construction.
  - Disaster Relief: Quick, low-cost shelters can be printed on-site in disaster-hit areas.

STUDENT ARTICLES

3D PRINTING: REVOLUTIONIZING CIVIL ENGINEERING

- Real-World Applications
  - India's First 3D Printed House: Built by TVASTA in IIT Madras campus using 3D concrete printing.
  - Bridges: The Netherlands printed a pedestrian bridge using 3D technology.
  - Affordable Housing: ICON (USA) has 3D printed low-cost homes in Mexico and Haiti. These examples prove that 3D printing is no longer a concept — it's a reality.

- Challenges to Overcome
  - Material limitations: Concrete used for printing must have flowability, quick setting, and strength.
  - Codes & Standards: Current IS codes don't fully cover 3D printing; regulations are evolving.
  - Initial Cost: The printer and software setup are expensive, though costs are dropping.
  - Skilled Manpower: We need engineers trained in CAD, robotics, and additive manufacturing.

- Our Role as Future Civil Engineers As students, we should:
  - Learn 3D modeling software like Revit, SketchUp, or Fusion 360.
  - Stay updated with innovations in construction materials and automation.
  - Attend workshops or internships focused on digital construction.
  - Promote research and startups in this field.

- Conclusion - 3D printing in civil engineering is not a futuristic dream — it's happening now. It offers speed, sustainability, and smart design like never before. As future engineers, we must be ready to adapt, learn, and lead in this new wave of construction.

Prathamesh Lonari, TE Civil Student

FACULTY ARTICLES

A CIVIL ENGINEER'S ROLE IN NATION BUILDING

Civil engineers are the backbone of a nation's infrastructure, playing a pivotal role in its development and progress. Their expertise is crucial in shaping the physical landscape and supporting the societal and economic growth of a country.

One of the primary contributions of civil engineers is in the development of robust infrastructure. This includes the design and construction of transportation networks like roads, bridges, railways, and airports, which are vital for connectivity and trade. Beyond transportation, civil engineers are responsible for critical utilities such as water supply systems, wastewater treatment plants, and solid waste management facilities, all of which are essential for public health and environmental sustainability.

Furthermore, civil engineers are instrumental in urban planning and development. They design and oversee the construction of buildings, residential complexes, and commercial centers, creating the spaces where people live, work, and interact. Their work extends to smart city initiatives, integrating advanced technologies to improve urban living conditions and resource management.

Effective resource management is a core skill for civil engineers. This involves optimizing the use of "Men, Material and Machine" on construction sites to ensure projects are completed "timely completion of projects within budget while maintaining quality standards". This focus on efficiency and quality is paramount for large-scale national projects. Key areas of resource management include "Material Management," "Labour Management," and "Time Management".

In addition to tangible infrastructure, civil engineers contribute to disaster preparedness and mitigation. They design resilient structures and systems that can withstand natural calamities, and they are often at the forefront of post-disaster reconstruction efforts, helping communities rebuild and recover.

The role of a civil engineer is dynamic and ever-evolving, adapting to new technologies and the changing needs of society. Their work directly impacts the quality of life, economic prosperity, and overall resilience of a nation, truly making them integral to nation-building.

Prof.S.S.Bodke, Asst. Professor, Department of Civil Engineering

MESSAGE FROM EDITORIAL TEAM

With great joy and pride, we present this edition of PRAGATI, the Civil Engineering Department's magazine. This issue reflects the vibrant academic spirit, creativity, and technical excellence that define our department.

From workshops and expert lectures to TechFest highlights and student innovations, each section captures a meaningful part of our journey. The feature articles showcase how our budding engineers are thinking beyond textbooks and contributing to real-world challenges.

I extend heartfelt thanks to the editorial team, faculty members, and students whose efforts brought this magazine to life. We hope this edition inspires all readers to learn, explore, and grow.

We sincerely thank Prof. Poornima Pathak for graciously designing the magazine template and for her continued guidance in shaping this publication.

Prof. Sandeep S. Bodke
Editor-in-Chief, PRAGATI

Student Editorial Team:
- Prathmesh S. Lonari (TE Civil)