

DEPARTMENT OF CIVIL ENGINEERING

NIRMAN

The Newsletter
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B.E. 2/4 Civil

COLLEGE VISION

“Striving for a symbiosis of technological excellence and human values”

COLLEGE MISSION

“To arm young brains with competitive technology and nurture holistic development of the individuals for a better tomorrow.”

DEPARTMENT VISION

“To strive for excellence in order to make the students better citizens with technical knowledge and social awareness”

DEPARTMENT MISSION

“To impart knowledge in the latest technologies to the students of civil engineering to fulfill the growing needs of the society.”



PEO'S

PSO'S

- To provide a better understanding of basic sciences and fundamentals of civil engineering.
- To develop competence in latest technologies to serve the industry or pursue higher studies.
- To inculcate professionalism with effective communication skills and ethical values.

- Understand various concepts of basic engineering sciences and mathematics to learn advanced concepts of Civil Engineering and apply them to practical problems.
- Apply principles of various specializations of Civil engineering including structural engineering, transportation engineering, environmental engineering, water resources engineering and Geotechnical engineering to tackle engineering problems.
- Acquire knowledge of ethical practices, communication skills, technical report writing skills and collaborative effort leading to lifelong learning.

NEWSLETTER

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Alumni Connect



Mr. Pradeep Roy, an esteemed alumnus of vasavi college of engineering, from 2007 batch delivered a lecture titled “Advances in Transportation Engineering and career prospects” to VI and VIII semester students. He is a licensed engineer in Ontario, Canada with 14yrs of extensive experience in the planning, designing and delivery of major capital infrastructure highway projects across the USA, UK and Sweden.

The Civil Engineering Department had the privilege of welcoming several of its distinguished alumni during the period from January to June 2024. Their visits provided valuable insights and inspiration to the present students.

On 12th January 2024, Mr. G. Harsha Vardhan (Batch of 2017) visited the department and shared his journey of entrepreneurship, currently running his own venture Kalavathi Jewellers.

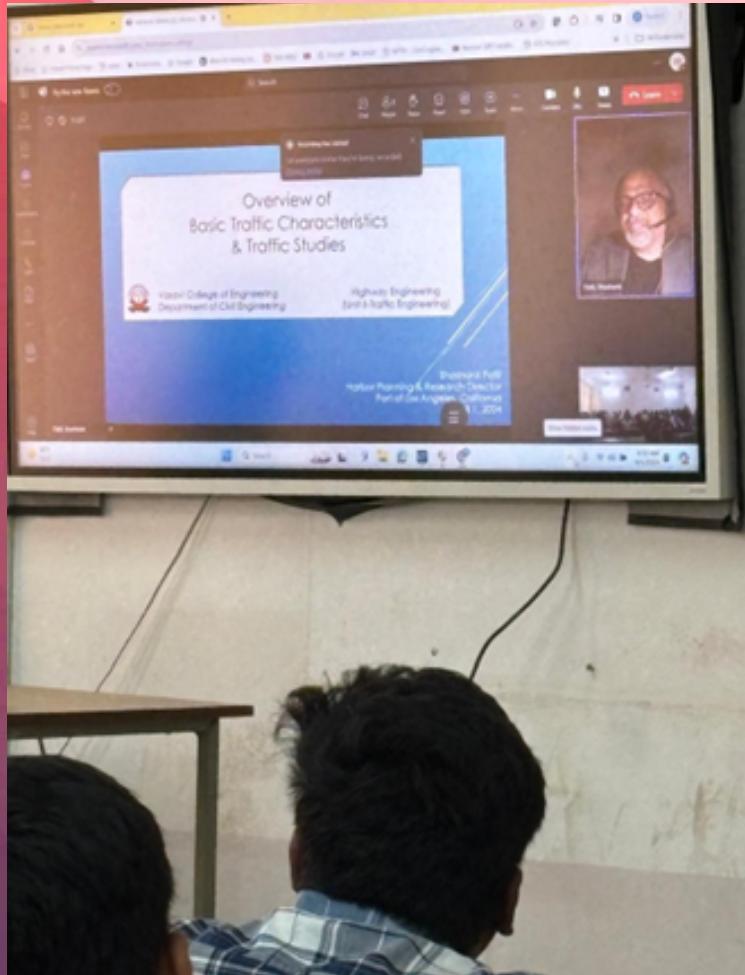
On 6th February 2024, two alumni from the 2019 batch, Mr. Nithin Kumar and Mr. P. Nishanth, interacted with the students. While Nithin is preparing for competitive exams like AEE and other government jobs, Nishanth is serving as an Office Assistant at Karnataka Gramin Bank.

The month of April witnessed a series of alumni visits. Ms. D. Prasanna Latha (2003), presently working as an AEE at I&CAD, and Ms. E. Anusha (2011), serving in a similar position at INCAD, graced the campus.

Adding to this were Ms. V. Rama Devi (2001) and Dr. K. Mahesh Kumar (2000), both holding esteemed positions as JEE in the R&D Department. Other alumni who visited include Mr. B. R. Vishnu (2004), now working as DEE at I&CAD, Ms. R. Sumalatha (2003), and Ms. M. Samhitha Harshini (2022), both DEEs at I&CAD.

These interactions rekindled memories and motivated the students to pursue their careers with passion and dedication.

Alumni Connect



An online technical talk on “traffic engineering studies and data analysis” by Mr. Shankar Patil, Harbor planning & Research Director, San Pedro, California, United states held on 01.04.2024 for VI semester students. The guest lecture on "Traffic Engineering Studies and Data Analysis" provided a comprehensive overview of the principles, methodologies, and importance of traffic engineering in urban planning and transportation management.



Seminars, Workshops & Guest Lectures

The new year began with a lecture on “Research and Development” delivered by Prof. K.V. Jaya Kumar, NIT Warangal on 3rd January 2024, exclusively for the Civil Engineering faculty.

February was filled with insightful sessions. Er. T. Srinivas spoke on “Career Growth in Civil Engineering” for final-year students, followed by Er. Surya Prakash from Satya Vani Projects and Consultants delivering a session on “Design of Steel Structures”.



March and April brought more technical exposure with lectures on Slag-Based Green Concrete by A. Shanmukha Reddy, Traffic Simulation Studies by Mr. L. Govinda, and Applications of Soft Computing in Civil Engineering by Dr. Venkata Dilip Pasupuleti of Mahindra University.

22nd and 25th January, a comprehensive Skill Development Programme was conducted covering topics such as Automatic Compactor, NDT, Permeability Tests, UTM, Triaxial Test, and Total Station. Experts including Dr. M.V.S.S. Sastri, Dr. S. Vijaya Kumar, and others guided the technicians through practical applications.



Faculty Highlights

The faculty of the Civil Engineering Department actively engaged in academic enrichment during this period. Dr. B. Sridhar, Professor and Head, participated in the ALP Summit 2024 held at BIMgrafx, Hyderabad on 18th–19th March. Mr. S. Kesav Kumar and Mr. J. Chaitanya, Assistant Professors, attended a one-day workshop on Modern Ground Improvement Techniques organized by BITS-Pilani Hyderabad in association with the Indian Geotechnical Society, Hyderabad Chapter, on 25th March 2024.



Along with participation, the department also marked several research achievements. Dr. M.V.S.S. Sastri, Associate Professor, published multiple patents including innovations in smart materials for construction, Turitella in M60 grade concrete, and recycled plastic composites in road construction. Similarly, Dr. B. Sridhar and Dr. K. Jayasree contributed patents on steel slag in asphalt and Hyperloop technology viability in India. These milestones highlight the department's commitment to advancing research in sustainable engineering.

Celebrating Student Excellence

Students of the department showcased their talent in a wide range of competitions and events. On 22nd February 2024, a Poster Presentation competition on “Net Zero Evolution: Shaping Sustainable Civil Engineering” was held under the Building Materials and Green Technologies Club. Students from II, IV, VI, and VIII semesters participated with great enthusiasm, with Dharavath Abhinaya (II Year) securing the 1st Prize, while Aitha Koushik and Nalla Abhitha (VI Year) shared the 2nd Prize, and Lamiya Tabassum (VI Year) along with Chelamalla Lavanya (IV Year) won 3rd Prize.

In addition, several students attended a guest lecture on the Automatic Train Protection System – Kavach, organized by the Department of Electronics and Communication Engineering on 27th February 2024.



On 22nd March 2024, students of Vasavi College of Engineering proudly secured First Place in a prestigious Quiz Competition organized by the Confederation of Indian Industry (CII) on the occasion of World Water Day. The winning team consisted of Gunji Preet (IV Year) and Shilapally Sirisha (IV Year). Another proud moment came when Mr. Nandipati Vinay (VIII Semester) won 2nd Prize in a three-day workshop on AI, BIM, and 3D Printing in Civil Engineering at Mahindra University, Hyderabad.

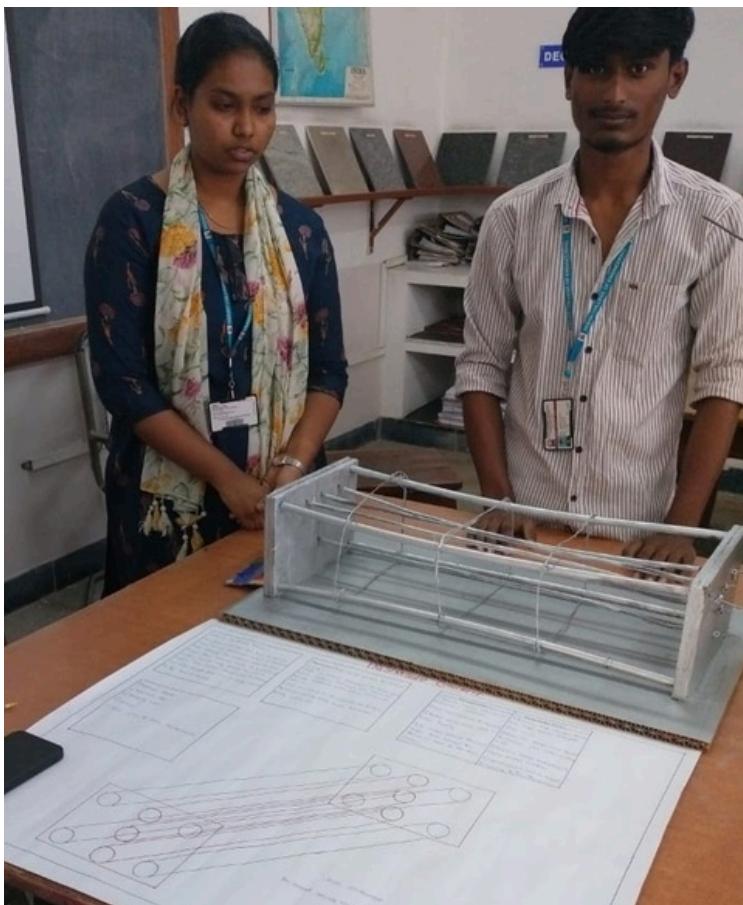


Structural Model Competition

The Department of Civil Engineering organized a Structural Model Competition and Presentation on 3rd March 2024 for VI and VIII semester students. Two enthusiastic student teams showcased their innovative models and ideas. One team presented a Prestressed Concrete Model, while the other demonstrated a Prestressed Concrete Pretensioned Member. The event was evaluated by esteemed judges Dr. C. Mohanlal, Dr. S. Vijaya Kumar, and Sri G. Raghavendra, who appreciated the creativity, technical knowledge, and practical approach displayed by the participants. This competition provided students with a platform to apply their classroom learning to real-world structural concepts, encouraging hands-on learning and teamwork.



Project Expo



"A Student Project Expo was organized to showcase the innovative projects developed by the students. The faculty members of the department thoroughly reviewed each project. This expo provides an excellent platform for students to demonstrate their technical skills, gain constructive feedback, enhance their presentation abilities, and foster innovation and teamwork."

3rd international conference on “advances in concrete and construction engineering for sustainability (ICACC-2024)



The highlight of this period was the 3rd International Conference on Advances in Concrete and Construction Engineering for Sustainability (ICACC-2024), held on 26th and 27th April 2024, which brought together academicians, researchers, and professionals to discuss emerging trends and sustainable practices in construction.

Noteworthy happenings



Confederation of Indian Industry (CII) organized a quiz competition at DRL Leadership Academy, Bachupally, Hyderabad on March 22, 2024, on the occasion of World Water Day (2024). The team from Vasavi College of Engineering won first place in it.

GUNJI PREET :160220-732-021
SHILAPALLY SIRISHA: 1602-20-732-037



"An outreach programme was organized by the department for Diploma students in Civil Engineering from Government Polytechnic College, Masabtank, Hyderabad. This initiative effectively bridges the gap between academic learning and real-time industry practices, enhances students' technical awareness, motivates them to pursue higher education, and strengthens the department's academic engagement with external institutions."



Industrial Visits

The department undertook several consultancy works during this period, including the testing of concrete cubes for various industries. Consultancy services were provided multiple times between January and May 2024, generating valuable hands-on exposure for faculty and students while also contributing to the department's outreach.

To enhance industry connect, an Industrial Visit was organized on 19th January 2024 for VIII semester students to M/s. Ayyanna Infra Pvt. Ltd., Hyderabad. Another visit was conducted to the Rural Technology Park (NIRD, Rajendranagar, Hyderabad) for II-year students, offering them first-hand insights into sustainable rural technologies.



"A technical symposium, Acumen, was conducted on April 18, 2024. During the event, students developed a gravity dam model as part of the technical activities. The program was conducted successfully with enthusiastic participation from students representing various colleges."

**TECHNICAL FEST
ACUMEN-2024**