



CIVIL NEXUS

VIDYA ACADEMY OF SCIENCE & TECHNOLOGY, THRISSUR
DEPARTMENT OF CIVIL ENGINEERING

2024-2025

JAN-APRIL 2024



OUR VIDYA OUR PRIDE



Vision

Progress through quality education by keeping pace with new challenges in the field of Civil Engineering.

Mission

- M1: To provide an academic environment for the students for developing as capable professionals by empowering them with knowledge, skills, moral values and confidence.
- M2: To prepare the students to become global leaders of tomorrow by promoting team work practices and inculcating communication and managerial skills.
- M3: To equip the students to accept new challenges by ensuring effective teaching and learning processes; involving them in research, consultancy and development activities; and providing them with exposure to the state of the art infrastructure.

Program Educational Objectives (PEOs)

PEO-1: Our graduates will apply fundamental technical knowledge and skills to find creative solutions to technological challenges and problems in various areas of basic sciences and civil engineering and contribute to society and nation when solving engineering problems and producing reliable solutions.

PEO-2: Our graduates will contribute to the professional practice of their chosen field through effective communication, leadership, team work and service while exhibiting high ethical and professional standards in fulfilling their responsibilities to both employers and society.

PEO-3: Our graduates will continue lifelong learning through professional activities and training and take up higher education, engage in research and development in civil engineering and allied areas of science and technology.

Program Specific Outcomes (PSOs)

PSO-I: Engineering Knowledge: Achieve excellence in the areas of planning, analysis and designs related to all divisions of Civil Engineering with proper management and construction techniques.

PSO-II: Expertise in Multidisciplinary Environment Achieve effective communication skills to work in a team as a member or as a leader in diverse professional environments.

PSO-III: Responsibility: Achieve eminence in finding solutions to complex Civil Engineering problems through self-learning and research within certain realistic constraints such as global, economic, environmental, societal, safety, and sustainability context.

Program Outcomes (POs)

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and Civil Engineering to the solution of complex engineering problems.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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
7. 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.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. 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.
11. 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.
12. 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.

ACADEMIC ACTIVITIES

STUDENT ACHIEVEMENTS

CE students clear NPTEL Examination



Sreeranjini Sreekumar (S8, CE Dept), Amaljo K. Joshy (S6 CE Dept) cleared NPTEL examination of the course 'Expansive Soil'.

Winners of NACTET Scholarship Program



The National Council for Technology and Training (NACTET), an autonomous organization registered under the Government of Kerala and Government of India, conducted a skill-based scholarship program titled C-Prize on 22 March 2024, for final year B.Tech Civil Engineering students. Winners of the C-Prize for both Batch A and Batch B were announced as follows: Batch A First - Ansaf Rasheed, Second - Akarsha K.R., Third - Arjun K.S. & Batch B First - Sreejith S., Third - Sreeranjini Sreekumar.

FACULTY ACHIEVEMENTS

CE HoD attends webinar on 'AI as a Productivity Tool'



Vidya Professors update their practical insights and innovations to increase productivity, and discuss, new challenges on how to out smart competition with Artificial Intelligence (AI). Dr Abhilasha P.S. (Prof. & HoD, CE Dept) attended a webinar on AI as a Productivity Tool on 04 April 2024 organized by Indian Institution of Industrial Engineering, Trivandrum Chapter.

PAPER PUBLICATIONS

CE Faculty Member and Vidya students publish paper in International Journal



Vidya Faculty Members develop every approach to get a place into the research publication and growth.

It is with huge pride and joy, the Dept of CE to share the delightful news of the publication of the paper titled 'Study on Shear Strengthening of Beams Aided By Geopolymer' in the International Journal of Creative Research Thoughts. This research is associated with B.Tech project conducted by students Akshaya M.A. (S8, CE Dept), Fathima Kulzum N.A. (S8,CE Dept), Athul V.M. (S8,CE Dept), Beslin Biju (S8,CE Dept), under the guidance of Mr. Kiran Babu A.R. (Asst Prof, CE Dept).

CE Faculty Member and Vidya alumni publish paper in International Journal



Vidya Faculty Members expand every outlook to get a place into the research publication and development apart from being an enormous knowledge platform for students. This research was associated with the funded project under KTU-CERD as part of the B.Tech project conducted by students John Jose Emmatty, Rahna K. Rajeev, and Helma Mariya Davis (2019- 2023 Batch) under the guidance of Dr Anjali P. Sasidharan (Asso. Prof, CE Dept).

FACULTY DEVELOPMENT PROGRAMME

CE Dept hosts three day FDP On ‘Harmony in Structures: Bridging Vastu and Civil Engineering’



The Department of Civil Engineering, in association with the ISTE Faculty Chapter, VAST, organized a three-day Faculty Development Programme (FDP) titled ‘Harmony in Structures: Bridging Vastu and Civil Engineering’ from 22–24 January 2024 for faculty members and students from KTU-affiliated colleges. The programme aimed to connect traditional Vastu principles with modern civil engineering practices. It was inaugurated by Sri Kanipayyur Krishnan Namboodiripad. Dr Abhilasha P.S. (Prof. & HoD, CE Dept) welcomed the gathering, and Dr Saji C.B.(Principal) delivered the presidential address. The programme featured sessions on Mathematics in Vastu, Vastu for better living, traditional Kerala residential architecture (Nalukettu), and the role of Vastu in the modern construction industry, led by experts including Sri Kanipayyur Krishnan Namboodiripad, Mr. Navaneeth E.P., and Dr Ashalatha Thampuran.

The FDP had 22 external participants, along with faculty members, staff, and students of the Civil Engineering Department. The valedictory function included a welcome address by Dr Abhilasha P.S., concluding remarks by Dr Saji C.B., presentation of the programme report by Dr Anjali P. Sasidharan, and a vote of thanks by Ms. Kalyani Vijayakumar. The programme was successful in encouraging interdisciplinary learning by combining the traditional knowledge of Vastu with the concepts of modern civil engineering.

DEPARTMENT ACTIVITIES

Concrete Mix Design Workshop offered a perfect practical exposure session for diploma students



The Department of Civil Engineering conducted a one-day workshop titled ‘Concrete Mix Design Workshop – Bridging Theory and Practice for Hands-On Expertise’ on 06 January 2024 for diploma students. Over 100 students from various polytechnic colleges and two faculty members from MTI (Maharajas Technological Institute, Thrissur) participated.

The sessions were handled by Ms. Nirmala Krishnan and Ms. Nisha Varghese, covering both theory and practical aspects of concrete mix design. Participants were divided into two groups, with the forenoon session focusing on theory and the afternoon session, led by Mr. Renjith R. dedicated to hands-on training.

Participation certificates were distributed by Dr. Abhilasha P.S. (Prof. & HoD, CE Dept), followed by a campus and lab visit guided by faculty members. The workshop concluded with positive feedback from participants, who found the session highly informative and satisfying.



VIBE conducts session on 'Engineering the Future' for school students



Vidya presents a perfect platform to interact with the school students and organizes several practical as well as theoretical sessions. Mr. Alex Chacko (Asst Prof, ME Dept), Ms. Anu Maria Antony (Asst Prof, CE Dept) and Mr. Kiran Babu A.R. (Asst Prof, CE Dept) handled the sessions and ingited the younger minds towards technology. The workshop was organized under the leadership of Ms. Anu Maria Antony (Asst Prof, CE Dept), Mr. Kiran Babu A.R. (Asst Prof, CE Dept) and Ms. Reshma (Trade Instructor, CE Dept) .

CE Dept oraganizes Technical Lecture & Demonstration on Post Buckling of Composite Shells



The Department of Civil Engineering, in association with the ISTE Students Chapter VAST, organized a technical lecture and demonstration on 'Post Buckling of Composite Shells' on 04 March 2024 to provide insights into Finite Element analysis of post-buckling. Dr R. Ramesh Kumar (Former Head, Honeycomb Product Development Division, VSSC) served as the resource person. The session was attended by faculty members and M.Tech Structural Engineering students. Dr Abhilasha P.S. (Prof. & HoD, CE Dept) introduced the speaker. The lecture was well received, with participants expressing positive feedback. The session concluded with a vote of thanks by Ms. Nisha Varghese, Assistant Professor and M.Tech Programme Coordinator.

Industrial visit enabled CE S6 students to understand and experience actual work environments



The Civil Engineering Department organized an Industrial Visit to Banasura Sagar Dam, Wayanad for S6 CE students from 06–08 March 2024 to understand real work environments. The visit was accompanied by Ms. Payal Das and Ms. Anu Maria Antony, Assistant Professors of the Civil Department.

Students learned about the Banasura Sagar Project, initiated in 1979, which supports the Kakkayam Hydroelectric Project and meets irrigation and drinking water needs in water-scarce regions. They were also introduced to the floating solar power project at the reservoir, capable of generating significant electricity and supplying it to the KSEB grid. The visit provided valuable insights into dam operations, renewable energy integration, and sustainable infrastructure.

Industrial Visit provided the insight on sustainable development for S8 CE A Batch students



The Civil Engineering Department organized an Industrial Visit for S8 CE A Batch students from 07–11 March 2024 to explore practical field applications. The visit included a highway bridge construction site at Panaji, Old Goa, where students observed various aspects of bridge construction and project execution.

Students also visited the Goa Waste Management Corporation (GWMC) facility to understand modern waste management practices. They learned about waste segregation, treatment of biodegradable and plastic waste, biogas production, and electricity generation, along with technologies such as magnetic separation and waste size reduction.

The visit provided valuable exposure to real-world practices in construction and sustainable waste management. Ms. Nirmala Krishnan and Ms. Anakha V.A., Assistant Professors of the Civil Department, accompanied the students.

CE Dept organizes session on ‘Prospects of higher studies in Civil Engineering’ for diploma students



Civil Engineers play a vital role in the economic growth of the nation. Engineers work for building infrastructure that can aid in economic growth of the country. Dr Abhilasha P.S. (Prof. & HoD, CE Dept), Ms. Nirmala Krishnan (Asst Prof, CE Dept) and Mr. Kiran Babu A.R. (Asst Prof, CE Dept) served as the resource persons. The session was co-ordinated by Mr. Sreedev M.S. (Lecturer, Civil Engineering Department, Maharajas Technological Institute, Thrissur). Mr. Sreedev is the alumnus of Vidya (2008-2012, B.Tech CE Dept).



CE Dept conducts Dept Alumni Interaction Series ‘Let’s Connect’



Vidya is fortunate that, every Vidya alumnus deems in inspiring their juniors and providing guidelines for improved prospects. An alumni interaction session with Mr. Hrethwik V.V. (2018-22 Batch, CE Dept) was arranged for final year students on 30 November 2023. Mr. Hrethwik is currently working as Site Engineer, M/s Novocrete (Pvt Ltd.) Thrissur. Ms. Vandana V. (Asst Prof, CE Dept) and Ms. Chithra M. (Asst Prof, CE Dept) led the program as co-ordinators.

CE HoD delivers session on ‘Engineering Horizons’ to the selected students of Thrissur District Prathibha Sangamam



The Head of the Civil Engineering Department delivered an engaging session on ‘Engineering Horizons’ to selected students of Thrissur District Prathibha Sangamam, highlighting emerging opportunities in engineering.

The session inspired curiosity and emphasized innovation, sustainability, and technology as key drivers of the future. Faculty members encouraged students to pursue engineering with passion and dedication, reflecting Vidya’s commitment to nurturing young talent and empowering future innovators.

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