CIVIL NEXUS

VIDYA ACADEMY OF SCIENCE & TECHNOLOGY,THRISSUR

DEPARTMENT OF CIVIL ENGINEERING

2022-2023

JAN-APRIL 2022

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

FACULTY ACHIEVEMENTS

CE HOD in Technical Sub-Committee of Project Management Group of Rebuild Kerala Initiative

Rebuild Kerala is a State Government initiative aimed at rebuilding life in Kerala after the floods. High quality and durable road infrastructure is a prerequisite for social, economic and industrial development of any state. As a part of Rebuild Kerala Initiative, Government have constituted the Project Management Unit (PMU) for the reconstruction of damaged road assets.

The Project Management Unit has been entrusted with the reconstruction of more than 40 flood damaged bridges, for which DPRs would be prepared by PMU Engineers and also through consultants. The Government have constituted a Technical Committee for the scrutiny and appraisal of the Project Reports prepared for works assigned to Project Management Unit. Project Director is now constituting a Technical Sub-Committee as an additional technical support for this purpose. Dr C. Justine Jose (Prof. and HoD, CE Dept) has been selected as one of the ten members of the Technical Sub-Committee of the PMU.

PAPER PUBLICATIONS

S7 B Tech (CE) students paper accepted for publication in proceedings of International Conference

A paper authored by S7 B Tech (CE) students Savio Francis, Shilpa M.K., Sreelakshmi Krishna, Vishnuja E.V. titled "Geotechnical investigations for the design of a cantilever retaining wall at Choondal Kunnu, Thrissur" and presented in the 4th International Conference on Innovations in Civil Engineering (ICICE-2022) organized by Department of Civil Engineering, SCMS School of Engineering and Technology, Ernakulum, has been accepted for publication in the final proceedings of the Conference. The paper presentation was held on 14 January 2022 and after the successful presentation and on submission of the extended abstract, official confirmation of acceptance towards publication in the paper was the partial outcome of their ongoing final year project with the guidance of Ms. Seetha Pisharikkel, Assistant Professor of Civil Engineering Department.

FACULTY DEVELOPMENT PROGRAMME

CE dept organizes one-day FDP on SKETCHUP

SketchUp is a 3D modelling software with a broad range of drawing and design applications including in architecture, interior design, industrial product design, landscape architecture, civil and mechanical engineering. A Faculty Development Programme on "Introduction to Basics of SketchUp" was conducted by the CE Dept to update the so needs and to familiarise the students with recent higher end softwares. Ms. Nirmala Krishnan (AP, CE Dept and Coordinator of the FDP) welcomed the participants and gave a brief introduction to the programme. Dr Deepa Mohan (Asso. Prof. and Head-in-charge, CE Dept) gave felicitations.

The session was handled by Ms. Aswini Valson, an Autodesk certified professional with 9 years' experience from Core Technologies, Thrissur. Core Technologies is one of the Autodesk Authorised Training Centre in Kerala, providing job oriented technical and software courses.

The program included training on setting up the template, understanding the layout, navigating in 3D, toolbar description, creating basic shapes, creating and placing 3D text, grouping and components, importing Auto Cad files, applying materials, creating animations and rendering the models. The training was highly informative with explanation of the tools and hands on sessions. At the end of the programme, all the participants were able to develop the 3D Model of a building. As many as ten faculty members from CE Dept and 15 M.Tech (Structural Engineering) students attended the programme.

CE HOD serves as resource person in ATAL academy FDP held in vidya

Dr C. Justine Jose (Prof. and HoD, CE Dept) served as a resource person in the AICTE Training and Learning (ATAL) Academy online FDP on “Recent Advances in Earthquake Engineering” held at Vidya during 6 – 10 December 2021.

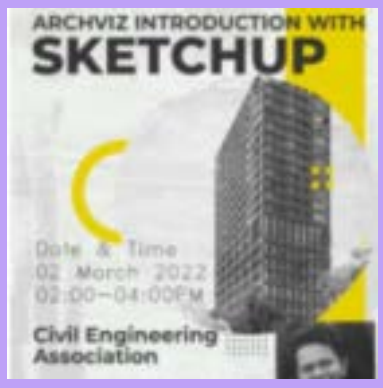
DEPARTMENT ACTIVITIES

CE Department Association organizes training on ArchViz via SketchUp

The Civil Engineering Dept Association of the College conducted a training class on “ArchViz: Introduction with SketchUp” for third year B.Tech CE students on 02 March 2022. The session was handled by Mr. Sarith Narayanan P.B., S1 M.Tech Structural Engineering. The program started with presidential address of Dr C. Justine Jose (Prof. and HoD, CE Dept). Mr. Kiran Babu A.R. (Staff-in charge of Civil Engineering Association) gave introduction to the Software class.

Software training is one of the requirements to be fulfilled by B.Tech students. A well planned, properly executed and evaluated software training helps a lot in developing a professional attitude. It develops an awareness about the software approach to problem solving based on understanding of processes. Besides software training build self confidence among students.

The session was very interactive and enlightening for students as well as for faculty members. The session concluded with a vote of thanks by Ms. Nirmala Krishnan.



Vidya gets appreciation certificates from Water Resources Department

Vidya students and staff members involved in the Karuvannur river project received an appreciation certificate from the Govt authorities for their committed and praiseworthy association with the Water Resources Department during November 2020 to February 2021 and for successfully completing the tasks assigned to them, namely, the field studies, water sample collection and analysis in the designated stretch of the river. The work was done in connection with the preparation of a DRP for abatement of pollution and rejuvenation of 21 rivers in Kerala.

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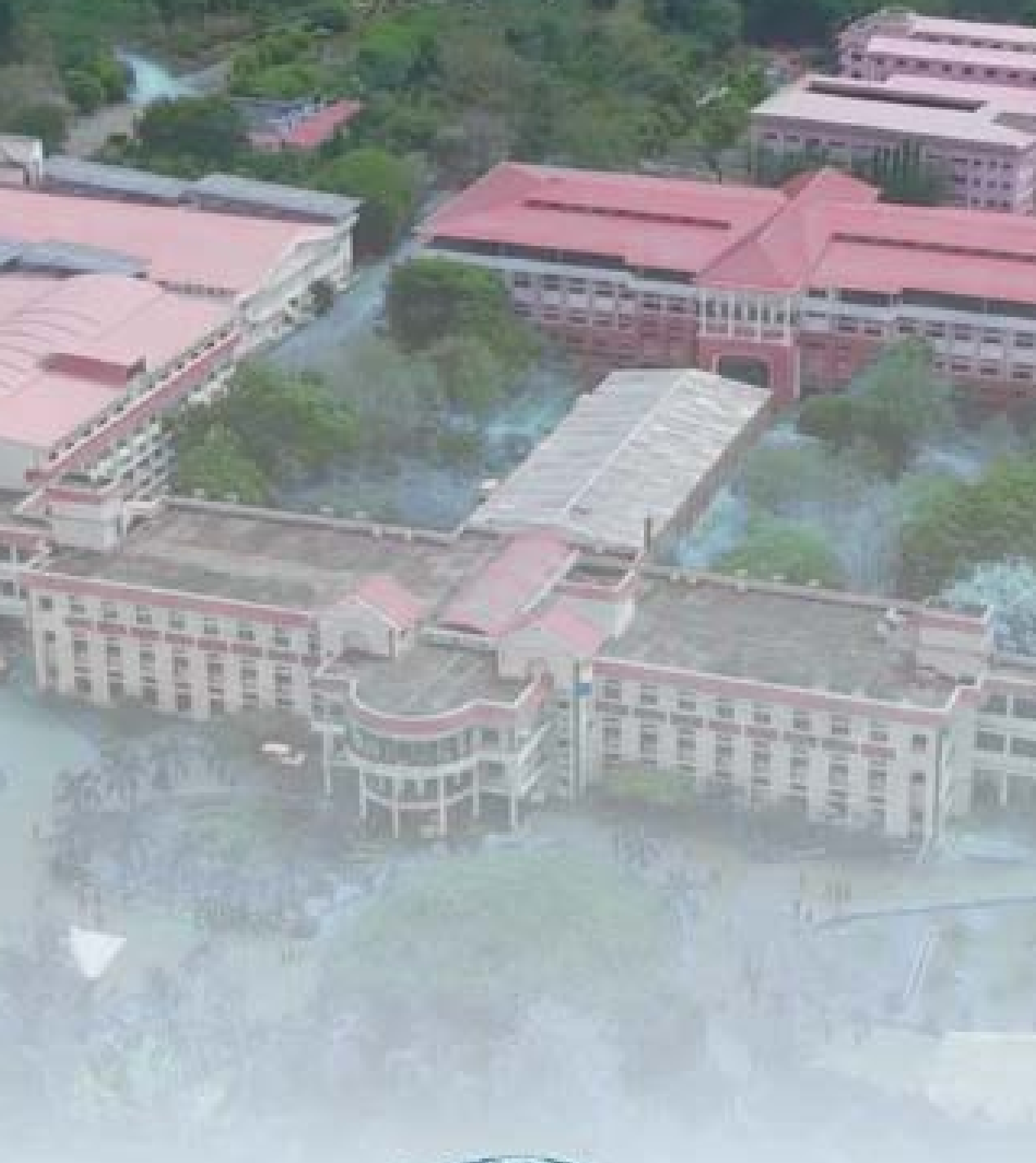

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Progress Through Education

DEPARTMENT OF CIVIL ENGINEERING