

CIVIL PULSE

A yearly Newsletter of the Department of Civil Engineering (ASET)

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Message from HoD's Desk

The Department of Civil Engineering was established in 2012 along with the inception of the institution. The department offers B. Tech. Degree in Civil Engineering, approved by AICTE and affiliated to A. P. J. Abdul Kalam Technological University. The Civil Engineering Department provides an outstanding academic environment complimented by excellence in teaching. The well-equipped laboratories in various fields of Civil Engineering such as Survey Lab, Material Testing Lab, Geotechnical Engineering Lab, Transportation Engineering Lab, Design and Analysis Lab and Environmental Engineering Lab offers all facilities for carrying out the practical oriented studies. Industrial visits, internships, lectures and summer training courses are arranged for the benefit of students. The Department had the privilege of producing rank holders in the University examinations. The students of the department actively take part in curricular, co-curricular and extra-curricular activities.



Prof. Kripa K. M.
HoD-CE



Vision

To produce graduates with capabilities for adapting to new challenges and responsibilities

Mission

To provide quality education to produce competent Civil Engineering professionals

To impart professional attitude through value-based education

To instill managerial skills among budding Civil Engineers through professional orientation

Programme Educational Objectives (PEOs)

PEO 1 – Graduates will have strong foundation to pursue a successful profession in Civil Engineering.

PEO 2 – Graduates will identify and resolve Civil Engineering problems with the help of engineering tools and technology.

PEO 3 – Graduates will exhibit managerial skills and professional ethics to meet social responsibilities.

The Future of Civil Engineering: Exploring the Growing Demand in 2024

Jayakrishnan R. , Assistant professor, CE

Civil engineering is a vital field that plays a significant role in shaping the built environment and improving the quality of life for people around the world. The demand for civil engineers has been increasing steadily over the years, and this trend is expected to continue in 2024 and beyond. In this article, we will explore the factors driving this demand, the emerging trends in civil engineering, and the skills that civil engineers will need to succeed in the future. Factors Driving Demand for Civil Engineers

1. Infrastructure Development: One of the primary factors driving demand for civil engineers is the increasing need for infrastructure development. As populations grow, there is a greater demand for transportation systems, water supply systems, and other essential infrastructure. According to a report by Grand View Research, the global infrastructure market is expected to grow at a CAGR of 6.1% from 2021 to 2028. This growth will create a significant number of job opportunities for civil engineers.

2. Sustainability: Another factor driving demand for civil engineers is the growing focus on sustainability. As concerns about climate change and environmental degradation increase, there is a greater need for engineers who can design sustainable infrastructure that reduces carbon footprint and minimizes environmental impact. According to a report by the World Green Building Council, green buildings could save up to \$40 billion annually by 2030. This presents a significant opportunity for civil engineers who specialize in sustainable design.

3. Technological Advancements: The rapid advancement of technology is also driving demand for civil engineers. New technologies such as drones, 3D printing, and virtual reality are changing the way infrastructure is designed, constructed, and maintained. Civil engineers who can leverage these technologies will be in high demand as they can help reduce costs, improve efficiency, and enhance safety on construction sites.

Emerging Trends in Civil Engineering

1. Smart Cities: The concept of smart cities is gaining popularity around the world as cities strive to become more efficient, sustainable, and livable. Smart cities use technology to optimize infrastructure systems such as transportation, water supply, and energy management. Civil engineers who can design smart city infrastructure will be in high demand as they can help cities reduce costs, improve sustainability, and enhance quality of life for residents.

2. Digital Twin Technology: Digital twin technology involves creating a virtual replica of physical infrastructure systems such as buildings or transportation networks. This technology allows engineers to test different scenarios and optimize designs before construction begins. Civil engineers who can leverage digital twin technology will be in high demand as they can help reduce costs, improve efficiency, and minimize risks associated with construction projects.

3. Resilience Engineering: Resilience engineering involves designing infrastructure systems that can withstand extreme weather events such as hurricanes or earthquakes. As climate change leads to more frequent and intense weather events, there is a greater need for resilient infrastructure systems that can withstand these events without causing significant damage or disruption to communities. Civil engineers who can design resilient infrastructure systems will be in high demand as they can help communities prepare for and adapt to extreme weather events.



3D Construction Printing

Kripa K. M. , HoD, CE

The use of technology in civil engineering is growing day by day. Recent advances in technology have led to a new era of construction based on 3D printing. 3D printing is a process in which the material is printed under computer control to build a three-dimensional product, typically layer by layer. 3D printed concrete is a special type of concrete, which can be deposited through a 3D printer layer by layer without any formwork support and vibration process. It's important performance indexes, such as workability, setting time, hardening time and mechanical properties, can be optimized by appropriate material selection and printing parameters.



3D printed concrete has a great potential for practical applications, such as the affordable housing construction in low-income countries, military bunkers when the soldiers fight in the wild, and complex constructions where the formwork is difficult to manufacture. It is also used in manufacturing industries to print rapid prototypes, complex shapes and small batch production using special polymers and metal alloys. To date, many building structures have also been successfully printed using 3D printed concrete technology. The quality of the 3D printed structure is ensured by manufacturing precision, material performance and aesthetic design.

Research and development in this field has been underway since 1995 . Joseph Pegna proposed an additive manufacturing method based on digital and automatic technology to extrude concrete material layer by layer to build the 3D architectural structure. Another technique, called contour crafting was

proposed by Behrokh Khoshnevis. This involved a novel ceramic extrusion and shaping method, which was an alternative to the emerging polymer and metal 3D printing techniques. Larsen and Toubro constructed a 3D printed building, a ground plus one-floor building of 700 square feet built-up area, at Kanchipuram with a special, in-house developed concrete mix using indigenously available regular construction materials (see Figure 1) [3]. Earlier in November 2019, to explore the feasibility of this innovative technology, the team had 3D printed a 240 square feet 1 BHK, in line with a typical economically weaker section building layout. The building was printed with both vertical reinforcement bars and horizontal distributors using a welded mesh that satisfied the provisions in the Indian codes and optimized the cost of construction. The entire building structure was 3D printed 'Cast in Situ' at the job site in an 'open to sky' environment, except for the horizontal slab members, within 106 printing hours, using a fully automated 3D printer.



First 3D Printed house in Kerala at Trivandrum



Infrastructure Development in India: 2023 & Beyond

Vivek V. S. , Assistant Professor, CE

In recent years, there has been a significant increase in investments in India's infrastructure sector. India's government has implemented numerous measures to encourage investment in various sectors, such as Make in India, Smart Cities, and the Infrastructure Development Finance Corporation (IDFC). The introduction of these measures has contributed to a rise in investment across multiple sectors of infrastructure including roads, railways, energy, and water and sanitation.

Infrastructure development holds great significance as it offers an array of economic, social, and environmental advantages. It assists in boosting the growth of GDP, generating employment prospects, enhancing trade and investment possibilities, improving connectivity and accessibility, upgrading healthcare infrastructure, and minimizing pollution levels.

Over the next ten years, India's infrastructure should continue to improve. A number of large, ongoing projects are supported by substantial capital and funding, as well as a plethora of alluring government schemes. India has become a significant market for companies that produce and develop construction equipment. Building environmentally friendly structures with cutting-edge technology and eco-friendly materials is a major priority. In addition, as construction projects become more complex, there is a growing need for sophisticated machinery.

Making infrastructure development a top priority, the government aims to play a pivotal role in achieving its objective of constructing a \$5 trillion economy by 2025. As per the Department of Economic Affairs, Gol, in order to reach its goal of a \$5 trillion economic plan by 2025, the nation needs to allocate \$4.5 trillion towards infrastructure development until 2030.

The Indian government has disclosed numerous infrastructure projects that it supports within the last few years. Some of the projects mentioned are the Bharatmala Pariyojana, the Narmada Valley Development Project, the Chenab River Railway

Bridge, the Delhi Metro Industrial Corridor, the Mumbai Trans Harbor Link, the Inland WaterWays Development Project, the Navi Mumbai International Project, and the Zoji- la and Z-Morh Tunnel Project. The main objective of these projects is to update India's infrastructure and enhance the standard of living for its population.

Benefits: The progress of infrastructure offers abundant advantages in terms of the economy, society, and the environment. From an economic standpoint, it assists in boosting GDP growth by encouraging private investments in industries like manufacturing, services, and transportation. In addition, it helps in generating job prospects as it offers employment options for trained workers. In addition, it enhances the possibilities for trade and investment through the enhancement of connectivity across various regions within the nation. In terms of social development, it contributes to enhancing healthcare services through facilitating improved availability to hospitals and health centers. Furthermore, it aids in enhancing educational amenities by facilitating enhanced accessibility to educational institutions throughout the nation. Improvements in public transportation systems like metro rail and buses assist in lowering pollution levels, thereby contributing to the environmental cause. In addition, it helps in enhancing the quality of water through the provision of improved sewage treatment systems and enhanced water supply systems.

Challenges : From 2012 to the present, the proportion of Public Private Partnership (PPP) initiatives within India's national highways has witnessed a substantial decline, plummeting from 85% to a mere 2%. The government must actively involve the private sector in infrastructure development, while also agreeing to share some of the financial responsibility and risk. Another challenge arises from the potential risk associated with a counterparty. If state and federal governments occasionally violate agreements or give up projects for political reasons, it may deter potential investors.

However, the modifications being implemented to certain policies ought to instill confidence in investors.

To give an example, the updated policy for public procurement now mandates timely payments, wherein 75% of the current invoices must be paid within a single working day. The previous L1 rule, which mandated that contracts should be given to the bidder with the lowest bid, has been abolished. At present, bidders who perform strongly in terms of technical capabilities are allocated 30% weightage. This signifies a significant departure from previous rules and regulations.

In conclusion, infrastructure projects supported by the government in India hold immense potential for fostering economic growth, generating employment opportunities, and enhancing the overall quality of life for its citizens. The economic, social, and environmental advantages they offer are too significant to be disregarded or underestimated. The future infrastructure projects carried out by the government will bring about favorable outcomes for developers, contractors, and brokers/agents in the real estate industry. This will be achieved by increasing the demand for real estate and presenting them with additional prospects for expanding their businesses. Ultimately, this has the potential to result in enhanced economic progress, enhanced living standards for Indian citizens, and a more promising future for everyone.



The art and engineering behind billboard design from buildings to ground structures

Beena Kumari I. P. , Assistant Professor, CE

INTRODUCTION Billboard design, whether perched high on buildings or strategically placed on the

ground, marries artistic flair with structural ingenuity. These towering and ground-level structures are not merely canvases for advertising but feats of engineering, carefully constructed to withstand environmental elements while captivating audiences with their visual impact. Let's delve into the structural significance, construction methods, and materials that define these iconic advertising mediums.

STRUCTURAL SIGNIFICANCE Billboards, whether affixed to buildings or constructed on the ground, demand meticulous planning and engineering prowess. Their structural integrity is paramount, ensuring stability against wind, rain, and other environmental factors. Additionally, these structures must meet safety regulations while accommodating the weight and dimensions of the advertisement displays.

Billboard Design on Buildings

Structural Integration: Billboard designs on buildings require seamless integration with the existing architecture. Engineers work closely with architects to ensure the proposed structure aligns with the building's load bearing capacity and aesthetic appeal. Mounting systems must be robust yet discreet, minimizing any potential damage to the building facade.



Construction Methods: Typically, steel frames or brackets are used to support billboard installations on buildings. These structures are engineered to distribute weight evenly, minimizing stress on the building's surface. Installation involves precise

measurements and anchoring methods to secure the billboard and prevent any hazards caused by high winds or seismic activities.

Materials Used: Steel, aluminum, and composite materials are common in building-mounted billboards. These materials offer strength, durability, and resistance to corrosion, crucial for withstanding varying weather conditions and maintaining the structural integrity of the display.

Ground-Level Billboard Design

Foundation and Support: Ground level billboards demand a different approach to structural stability. Their foundations must account for factors such as soil conditions, traffic vibrations, and pedestrian safety. Engineers employ various foundation designs, including concrete footings or reinforced structures, to anchor the billboard securely to the ground.

Construction Methods: Unlike building-mounted billboards, ground level structures often require a more straightforward installation process. Prefabricated components are assembled on-site, with careful attention to anchoring methods to prevent tilting or shifting. Structural stability is ensured through a combination of anchoring systems and robust support structures.

Materials Used: Ground-level billboards also utilize materials like steel, aluminum, and sturdy composites for their frames and supports. Additionally, materials resistant to abrasion and weathering are crucial for prolonged exposure to foot traffic and environmental elements.

CODAL PROVISIONS ON HOARDING BOARD DESIGN

In India, the design and construction of hoarding boards are governed by various standards and codes to ensure safety, structural stability, and compliance with regulations. Some of the key codes and standards that are relevant for designing hoarding boards in India include:

National Building Code (NBC): The National Building Code of India provides comprehensive guidelines for various aspects of construction,

including advertising structures such as hoarding boards. It covers aspects related to structural stability, material specifications, wind load considerations, and safety measures.

Indian Road Congress (IRC) Standards: For hoarding boards placed alongside roads or highways, the Indian Road Congress standards come into play. These standards specify the design, placement, and safety considerations for advertising structures near roadways to ensure they don't pose hazards to motorists or pedestrians.

Bureau of Indian Standards (BIS) Codes: Several BIS codes are relevant to the construction and design of hoarding boards, particularly concerning materials, structural design, and safety factors. These include codes related to materials like steel, concrete, timber, etc., that might be used in constructing the hoarding board.

Local Municipal and Development Authority Guidelines: Different municipalities and local development authorities might have their own additional guidelines or specific requirements for the installation of hoarding boards within their jurisdiction. These could include restrictions on height, placement, setback distances, and other zoning regulations.

Wind Load Considerations: Hoarding boards are exposed to various environmental factors, including wind loads. Considering India's diverse climatic conditions, the design should adhere to wind load codes specified in the relevant standards to ensure the stability of the structure.

Structural Stability and Safety: Structural stability and safety standards are critical. The design should comply with load-bearing capacity standards and safety factors to prevent collapse or accidents. This involves factors like proper anchoring, support structures, and materials that can withstand environmental stresses. **Fire Safety and Electrical Codes:** If the hoarding board incorporates lighting or electrical components, adherence to fire safety and electrical codes is essential to prevent fire hazards and ensure electrical safety. When designing a hoarding board in India, it's crucial to consider these codes and standards to ensure compliance and safety. Consulting with structural engineers,

architects, and local authorities knowledgeable about these regulations is advisable to ensure that the hoarding board meets all necessary requirements. Billboard design, whether on buildings or ground structures, represents a harmonious blend of artistic vision and engineering precision. The structural significance of these installations cannot be overstated, as they not only serve as advertising platforms but also stand as structural elements within urban landscapes. From integrating seamlessly with architectural aesthetics to withstanding environmental challenges, the construction methods and materials employed in billboard design showcase innovation and resilience. As technology advances, these structures continue to evolve, embracing new materials and construction techniques that push the boundaries of creativity and durability. Ultimately, behind the captivating visuals of billboard advertising lies a testament to the artistry and engineering prowess that ensures these structures endure as iconic landmarks in our cities.

Graphene Revolutionizes Construction

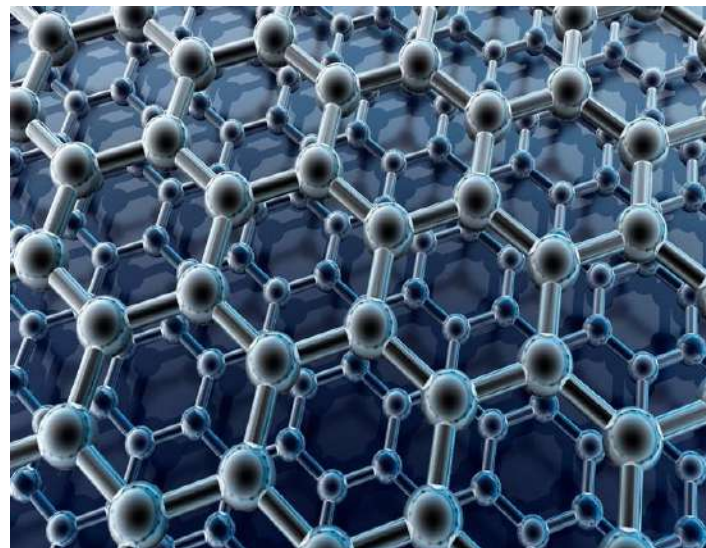
Lakshmi Sai A. , Assistant Professor, CE

Graphene-based materials show promise for next-generation construction, offering strength, flexibility, and conductivity. Researchers are exploring Graphene-enhanced concrete and other innovative applications for sustainable and durable structures.

Graphene, a single layer of carbon atoms arranged in a hexagonal lattice, plays a transformative role in construction technology due to its remarkable properties. Some key aspects include:

1. **Strength and Durability:** Graphene is incredibly strong, surpassing most traditional construction materials. When incorporated into concrete or other composites, it enhances structural integrity and durability.
2. **Lightweight:** Despite its strength, graphene is exceptionally lightweight. This contributes to the development of lighter and more efficient construction materials, reducing the overall weight of structures.

3. **Conductivity:** Graphene is an excellent conductor of electricity. This property is exploited in developing smart materials and structures with integrated sensors for real-time monitoring of conditions like stress, strain, or temperature.
4. **Flexibility:** Graphene is flexible and can be incorporated into various materials without sacrificing its strength. This flexibility allows for the creation of bendable and adaptable construction components.
5. **Thermal Properties:** Graphene exhibits excellent thermal conductivity. This characteristic can be leveraged to enhance the insulation properties of construction materials, contributing to energy efficiency in buildings.
6. **Environmental Benefits:** The incorporation of graphene in construction materials can lead to more sustainable and eco-friendly solutions. For example, graphene-enhanced concrete may require fewer raw materials, reducing environmental impact.
7. **Innovation in Design:** Graphene's unique properties enable architects and engineers to explore innovative designs that were previously challenging or impossible with traditional materials.



Graphene holds promise for various applications in construction technology, offering enhanced performance and sustainability. Some potential uses include:

1. **Graphene-Enhanced Concrete:** Adding Graphene to concrete can significantly improve its strength, durability, and resistance to environmental factors. Graphene oxide or Graphene nanoplatelets can be incorporated to create a more robust and long-lasting concrete mix.
2. **Smart Materials:** Graphene's conductivity makes it ideal for creating smart materials in construction. These materials can have embedded sensors that monitor structural health, temperature, and stress, providing real-time data for maintenance and safety purposes.
3. **Lightweight and Strong Composites:** Graphene composites can be used to manufacture lightweight and strong construction materials. These materials have the potential to replace heavier traditional components, leading to more efficient and sustainable structures.
4. **Transparent Films for Windows:** Graphene's transparency and conductivity make it suitable for creating thin, transparent films. These films could be used in windows to control light transmission, offer solar energy harvesting, and provide improved insulation.
5. **Flexible Electronics in Buildings:** Graphene's flexibility enables the development of flexible electronics that can be integrated into building materials. This could lead to innovations such as flexible displays, smart wallpaper, or even electronic textiles.
6. **Thermal Insulation:** Graphene's excellent thermal conductivity can be harnessed to improve insulation in construction materials. Incorporating Graphene into insulation materials can enhance their performance and contribute to energy efficiency in buildings.

7. **Waterproofing and Corrosion Resistance:** Graphene coatings can be applied to surfaces to make them waterproof and resistant to corrosion. This is particularly beneficial for protecting structures against water damage and extending their lifespan.
8. **Energy Storage:** Graphene-based materials can be utilized in energy storage solutions, such as super capacitors. Incorporating these materials into the construction of buildings could potentially contribute to on-site energy storage systems.



Biofiltration- A Technology for waste water treatment

Neethu John, Assistant Professor, CE

Biofiltration is a method for the removal of undesired materials present in wastewater and air. Wastewater treatment systems through biofiltration can be efficient and economical technologies for breaking down and removing organic contaminants from wastes which are produced from various industries such as food and beverage, chemical manufacturing, oil and gas, and municipal industries. These systems use bacteria and their naturally feeding and decay cycles occurring to break down and consume unwanted contaminants. Mostly used in odour control applications, these systems can biodegrade compounds in their vapor or gas phases, but they are also used to treat wastewaters.

The application of biofiltration technology has increased rapidly during the several decades. Potential markets for biofiltration include the treatment of odours; treatment of volatile organic

compounds (VOCs) and hazardous air pollutants (HAPs); and treatment of petroleum hydrocarbons. Industries that produce odorous emissions include wastewater treatment plants, composting and sludge treatment facilities, foundries, pulp and paper plants and tobacco products manufacturing plants. Wastewater treatment plants are treating increased flows, thereby increasing odour loads at the plant. Many wastewater treatment plants have begun to realize odour control strategies, and biofiltration will play a major role in many such cases.

Biofilter has successfully been used as a trickling filter for the domestic wastewater treatment. The application options of trickling biofilter vary with the treatment objectives, the media type, and the nature of the other treatment units in the process point. It can be used for roughing, carbon oxidation, combined carbon oxidation and nitrification with different arrangements of two or more biofilters units. The advantages of using bio-trickling filter over the conventional activated sludge process are; less operational cost, less area requirement, less chemical uses, and well-stabilized sludge (no sludge bulking or floating problem). In advanced wastewater treatment, biofilter can be used along with conventional physicochemical processes such as coagulation, flocculation, filtration and sedimentation. Since the main purpose of the biofilter is to eliminate the dissolved organics, the suspended particles are removed in conventional filter before subjecting the wastewater to the biofiltration system.

Biofiltration of VOCs is a major problem in the wood products, pulp and paper, and surface coating operations. Petroleum hydrocarbons are released during refining, transfer operations, from storage tanks, etc. Most of these hydrocarbons consist of aliphatic and aromatic compounds, which are simply biodegraded in biofilters. The volatile hydrocarbons are transferred into the air phase, in which they can be effectively treated using biofiltration. Increasing number of industries is already beginning to realize the potential advantages of biofiltration over chemical process, which include: minimal generation of carbon dioxide, lower investment and operating costs, the only by-product of biofiltration is waste biomass, which can be easily disposed in the sewers.

January-June 2023

Faculty development program on

“SUSTAINABLE MATERIALS IN CIVIL ENGINEERING”



KTU sponsored Three day Faculty Development Program on Sustainable materials in Civil Engineering, organized by Department of Civil Engineering at Ahalia School of Engineering and Technology was inaugurated by Shri. Saleem Kumar M., Assistant Executive Engineer, Kerala Water Authority on 23rd January 2023 at 9.00 am. He spoke about the importance of sustainability in the current scenario and encouraged the FDP participants to incorporate the same in Civil Engineering construction practices. Welcome address for the function was delivered by Prof. Kripa K.M., Head of Civil Engineering Department and Dr. P. R. Sreemahadevan Pillai, Principal, Ahalia School of Engineering and Technology gave the presidential address. He also gave an insight about the sustainable practices at Ahalia Health Heritage and Knowledge Village, during his presidential speech. He also thanked all the eminent resource persons of Faculty development programme and the external participants. The session ended with vote of thanks which was proposed by Faculty Development programme coordinator, Dr. Mahima Ganeshan, Assistant Professor, Civil Engineering. The three day long FDP was handled by Dr. Sunitha K. Nayar, Assistant Professor, IIT Palakkad, Dr. Sudheesh T.K. Associate Professor, IIT Palakkad, Dr. V. Sreevidya, Professor, Sri Krishna College of Technology, Coimbatore, Dr. Praveenkumar S., Assistant Professor, PSG college of Technology. Dr. Praveenkumar S., Assistant Professor, PSG college of Technology, Dr. Veena Venudharan, Assistant Professor, IIT Palakkad, Dr. P.R. Sreemahadevan Pillai, Principal, Ahalia School of Engineering and

Technology, Er. K.O. Pramod, Director, Structures India Pvt Ltd.

Workshop on

“AESTHETIC ASPECTS OF BUILDING DESIGN”



The Civil Engineering Department arranged a workshop on “Aesthetic Aspects of Building Design” conducted by CISAT, Thrissur on 29/03/2023, Wednesday from 9.30 a.m. to 12.30 p.m. The team members from CISAT explained about various the aesthetic aspects of building design to our students. They conducted a hands-on training related with building drawing and a competition for the students after dividing the entire class into six groups. The students performed well and the winning team was given a memento to Mrs. Kripa (HoD, Civil Engg. Department).

Industrial visit to

“MALAMPUZHA DAM”

Department of Civil Engineering Organized a One day Industrial visit to Malmpuzha dam on March 21 (Tuesday) for B.Tech. Civil engineering First year, Second year and Third year students. The dam officials explained the need and different instruments of infiltration gallery and the effect of seepage and different dam safety parameters set in place. The students were permitted to study the infiltration gallery, canal regulator and associated structures shutter system, catchment area of the dam, and

photo gallery depicting the history of the dam. The participants were able to relate their theoretical knowledge with actual structures and the visit served as an appropriate mix of fun and insightful learning. Mrs.Lakshmi Sai, Mrs. Beena Kumari I. P., Mr. Suresh Babu, Mr. Prasanth A., staff members of the Civil Dept., accompanied the students.



A Session on

“IMPORTANCE OF CIVIL ENGINEERING SOFTWARES”



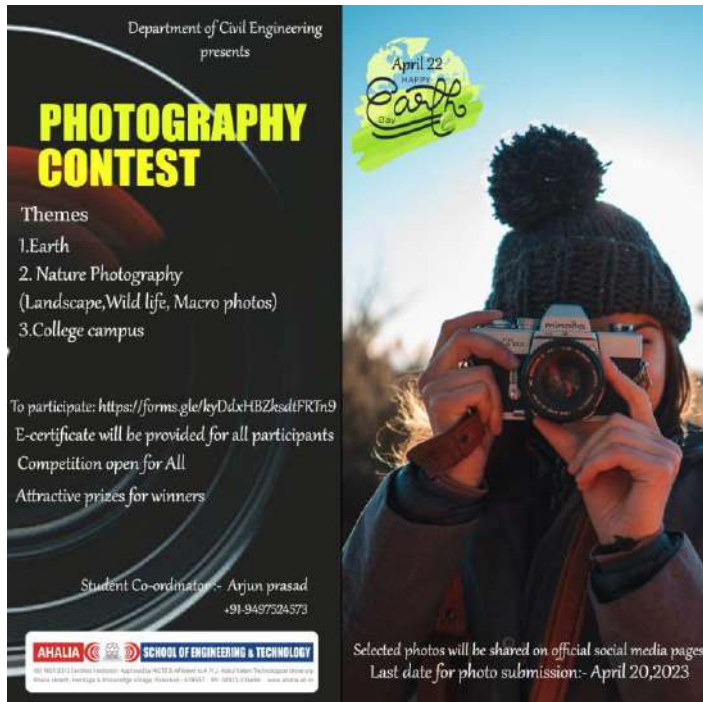
Civil Engineering Department, ASET arranged a session on Importance of Civil Engineering Software courses conducted by Learntech IT Academy, Palakkad on 17/03/2023, Friday at 9.30 am to 11.30 am. The team members from Learntech IT Academy explained about various software courses. Also, they offered a software package at minimal cost to our students. It was an informative session about recent software used in the current Civil Engineering field.

Photography Contest on

“EARTH DAY”

On 22 April 2023, the Department of Civil engineering organized a photography contest as part of the Earth

Day celebrations. The theme for photography contest was Nature photography, Macro photography.



Department of Civil Engineering presents

PHOTOGRAPHY CONTEST

Themes

1. Earth
2. Nature Photography (Landscape, Wild life, Macro photos)
3. College campus

To participate: <https://forms.gle/kyDdxHBZesd4FK7n9>
E-certificate will be provided for all participants
Competition open for All
Attractive prizes for winners

Student Co-ordinator :- Arjun prasad
+91-9497294373

April 22
Happy Earth Day

Selected photos will be shared on official social media pages
Last date for photo submission:- April 20, 2023

AHALIA SCHOOL OF ENGINEERING & TECHNOLOGY



जल शक्ति मंत्रालय
MINISTRY OF JAL SHAKTI

Swacch Sujal Shakti Samman
POSTER DESIGN COMPETITION WINNERS

First Prize
Anaswara B Krishnan
S6 CE

Second Prize
Greeshma K
S2 CE

Third Prize
Namitha
S6 CE

Congratulations!

AHALIA SCHOOL OF ENGINEERING & TECHNOLOGY Accredited by NAAC

JAL SHAKTI ABHIYAN 2023

Ahalia School of Engineering & Technology (ASET) has initiated different activities related to water conservation as a part of the ongoing Jal Shakti Abhiyan 2023. By conducting such programmes students and staff know the necessity of saving water and water conservation. The students are encouraged for water conservation through activities like quiz, poster design, writing of slogan, wall writing. Our institution celebrated world water day. Students and staff took oath to conserve water and to be compassionate towards the thirsty beings.



जल शक्ति मंत्रालय
MINISTRY OF JAL SHAKTI

Swacch Sujal Shakti Samman
SLOGAN WRITING COMPETITION WINNERS

First Prize
Dharsana M
S6 CE

Second Prize
Vismaya V
S6 CE

Third Prize
Soumya Sree M
S8 CE

Congratulations!

AHALIA SCHOOL OF ENGINEERING & TECHNOLOGY Accredited by NAAC

Workshop on

“CAREER AFTER CIVIL ENGINEERING: AN INSIGHT TO QUANTITY SURVEY PROFESSION”

The Civil Engineering Department arranged a workshop on “Career after Civil Engineering: An

insight to Quantity Survey Profession” conducted by Zeitnah Group of Institutions, Palakkad on 05/04/2023, Friday from 10.00 am to 3.30 pm. The team member from Zeitnah Group explained about various career opportunities in Civil Engineering in India and abroad. They had suggested several ways to do job search. Also, they conducted a hands-on training on quantity survey which will be very useful in this field.



July-December 2023

A Seminar on

“ROLE OF LATEX IN SCIENTIFIC WRITING”

Department of Civil Engineering conducted seminar on Role of Latex in Scientific writing on 21/08/23 At Design & Analysis Lab the session was handled by Mr. Vivek V S (AP/CE) and the program was coordinated by Mrs.Kripa K M (HOD/CE)



Memorandum of understanding

With LearnTech IT Academy, Palakkad



Ahalia School of Engineering and Technology and Learntech IT Academy, Palakkad, entered into MoU 16.10.2023. The meeting was attended by Ms. Beena.C K, Assistant General Manager, Mr. Ajay C, Assistant Manager, Mr. Pandiswaran B., Marketing Manager of Learntech IT Academy, Dr. P. R. Sreemahadevan Pillai, Principal, Dr. Binoy Balan, HoD, Dept. of S & H, Prof. Prakash D., HoD, Dept. of ME, Dr. G. Murugananth, HoD, Dept. of EEE and Prof. Kripa K. M., HoD, Dept. of CE. Both parties will be collaborating in activities beneficial to the students, staff and society as a whole.

A TALK ON “KERALA BUILDING RULES”

The Department of civil engineering conducted a talk on 'Kerala building rules' on Oct 25,2023 10.00 am to 11.00am at Design and analysis lab for Semester 5 and 3 Civil engineering students the sessions were handled by Jayakrishnan R & Vivek V S, Assistant professor, CE





CIVIL ENGINEERING DEPARTMENT ASSOCIATION INAUGURATION

Civil Engineering Department, ASET conducted Department association “SAMANVAYA” on 17th of November 2023. The program was inaugurated by chief guest Er. Jagadesh Kannan, M.D., Archetype Design Services Pvt Ltd., Coimbatore. ASET Principal, Dr. P. R. Sreemahadevan Pillai gave Presidential address. Vice principal Dr. Krishnakumar Kishore and HoD, CE Mrs Kripa K M also joined the session. Mr. Jagadesh Kannan presented a talk on “Scope of Civil Engineering”. He mentioned about various job opportunities in Civil Engineering field which was very much useful to our students. Following the session, Civil IQ test, Quiz and Idea pitching were conducted. The entire program was successfully coordinated by selected Association members from each class and with their wholehearted hard work made the program a grand success.



CERTIFICATE DISTRIBUTION CEREMONY OF VALUE ADDED COURSES ORGANIZED DURING AY 2023-24

Department of Civil Engineering organized Value Added Courses for all the batches in the department in association with LearnTech IT Academy. The courses were career and market oriented, skill-enhancing courses that empower the students beyond their domain of study.

The certificates were distributed to all the students who successfully completed the course by Dr. P.R. Sreemahadevan Pillai, Principal and Prof. Kripa K. M., HoD Civil on 01.12.2023. All the faculty and students joined the session.



A TECHNICAL TALK ON “ADVANCED DESIGN CONNECTION & BIM WORKFLOW”

Department of civil engineering organized a technical talk on "Advanced design connection & BIM workflow" on December 7, 2023 in association with LearnTech IT academy the session was handled by Architect Mr. Surya Prakash A V, The program was coordinated by Mr. Jayakrishnan R, Assistant professor, Department of civil engineering. The session was given for both 2nd year and 3rd year B.Tech Civil Engineering students.



INDUSTRIAL VISIT TO Design Mix- Ready Mix Concrete (RMC), Bangalore

Department of Civil Engineering Organized a One day Industrial visit to Design mix- Ready mix concrete, Bangalore on December 3 to December 8 for B.Tech. Civil engineering Final year students. The officials explained the need and different instruments of Ready mix concrete plant. The students were permitted to study the working of ready mix concrete plant & the visit served as an appropriate mix of fun and insightful learning. Mrs. Kripa K M, Mr. Vivek V S., staff members of the Civil Dept., accompanied the students.



ACHIEVEMENTS

Congratulations!
For getting placed at
AHALIA GROUP

ARJUN PRASAD S
2019-23
CE

2023 ADMISSION IN PROGRESS

For Details:
9496000133
04923-226666

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OF CIVIL ENGINEERING DEPARTMENT



Aiswarya Padmadas
(2014-20)
Early stage Researcher of EU
(Marie Curie Fellow)



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2019-23



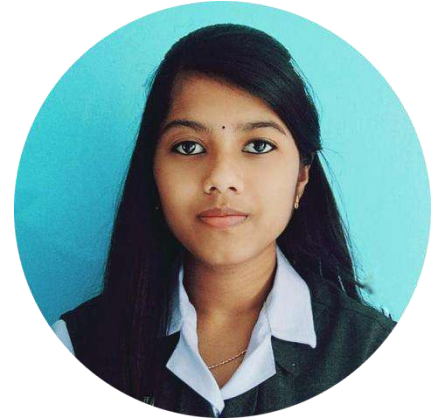
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2019-23



Dwanika R
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