Times Higher Education
Impact Rankings 2025

HINDUSTHAN EDUCATIONAL AND CHARITABLE TRUST
HICET

HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

An Autonomous Institution

Valley Campus, Pollachi Highway, Coimbatore 641 032, Tamil Nadu, India | www.hicet.ac.in

UN SDG 6

CLEAN WATER AND SANITATION

6.2 WATER CONSUMPTION PER PERSON

6.2.1 Does your university as a body measure the total volume of water used in the university that is taken from mains supply, desalinated, or extracted from rivers, lakes, or aquifers?

Yes, The institution actively monitors and records the volume of water used on campus, prioritizing efficient water management and sustainability. The water supply is sourced from both purchased and self-extracted sources. Annually, 36,000 units (36,000 m^3) of water are purchased from the local municipality through metered connections, allowing precise measurement and regulation of water usage. In addition, the campus operates 9 bore wells, contributing a substantial portion of water requirements. When operating at full capacity, the campus has a demand of 554.67 m^3 per day, of which 250 m^3 can be treated and reused if the treatment plant runs continuously for 24 hours. Regular maintenance and monitoring of these bore wells ensure optimal yield and responsible groundwater utilization. Water from bore wells is used primarily for landscape irrigation, laboratory needs, and sanitation across campus. By combining municipal water and bore well supply, the institution minimizes dependency on a single source and strengthens water sustainability.

6.2.2.1 Volume of water used in the university: Inbound (treated/extracted water)

Volume of water used in the university: Inbound (treated/extracted water): 202455 m^3

6.2.2.2 Campus population

Campus Population (Students, Staff and Faculty): 5768

Total Campus Population

S.No.	Description	Total
1	Students - Hostellers (UG and PG)	3279
2	Students - Day Scholars (UG and PG)	1892
2	Academic Faculty	386
3	Non-teaching and Others	211
	Grand Total	**5768**

Hostel Population

S.No.	Description	Type	Capacity	Students Residing
1	Girls Hostel (Jansi Rani)	Girls Hostel	800	655
2	Boys Hostel (Dheeran)	Boys Hostel	300	245
3	Boys Hostel (Senior)	Boys Hostel	1374	1200
4	Boys Hostel (Cheran)	Boys Hostel	452	430
5	Boys Hostel (Cholan)	Boys Hostel	348	321
6	Boys Hostel (Pandian)	Boys Hostel	432	428
Grand Total			**3706**	**3279**

Annual Water Demand

S. No.	Description	Nos.	Rate of Supply (Litres / day)	Total Supply (Litres / day)	Total Supply (m^3 / day)
1	Hostellers	3279	135	442665	442.665
2	Day Scholars	1892	45	85140	85.140
3	Faculty and Others	597	45	26865	26.865
Grand Total		**5768**	**225**	**554670**	**554.67**

Total water demand per day = 554.67 m^3

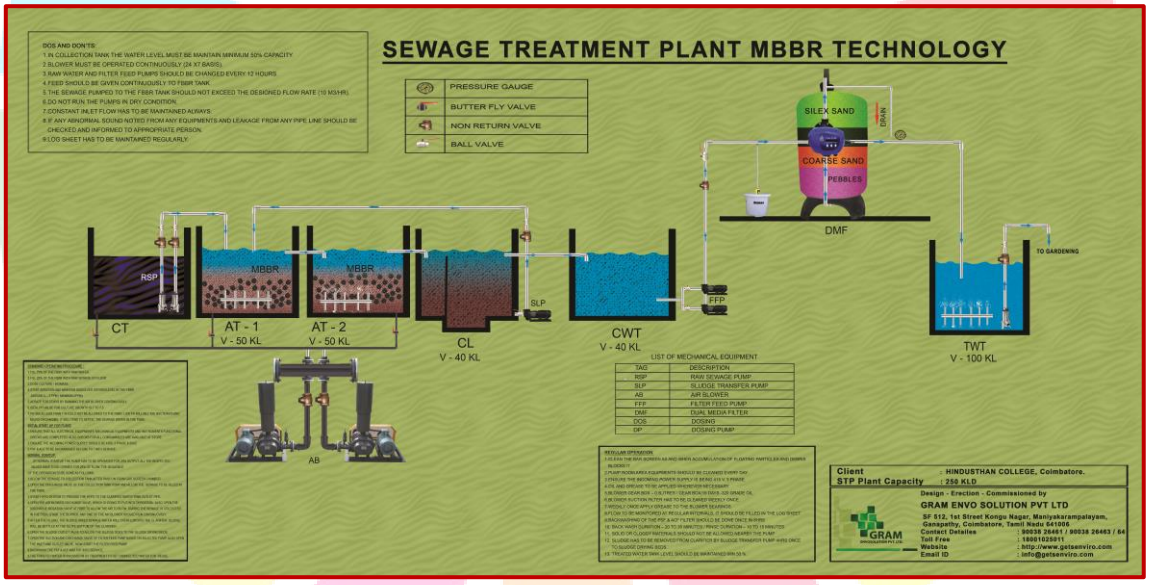
Total water demand per year = 202455 m^3

Water Meter

6.3 WATER USAGE AND CARE

6.3.1 Does your university as a body have a process in place to treat wastewater?

The institution operates a wastewater treatment plant with a robust daily capacity of 250,000 liters, playing a crucial role in managing and treating the wastewater generated across the campus. This wastewater treatment plant employs Moving Bed Biofilm Reactor (MBBR) technology that treats organic waste by using small, specialized biofilm carriers that promote the growth of beneficial microorganisms. These carriers are constantly in motion within the reactor, maximizing contact between the wastewater and the microbial biofilms that degrade organic pollutants. This design enhances treatment efficiency by optimizing nutrient and oxygen distribution even with high loads. The MBBR process integrates both aerobic and anaerobic treatments to achieve excellent removal rates for contaminants while maintaining a compact and efficient system. The treated water is then repurposed for non-potable applications, such as landscaping and irrigation, significantly reducing campus demand on freshwater sources.



Layout of Sewage Treatment Plant

Air Blowers

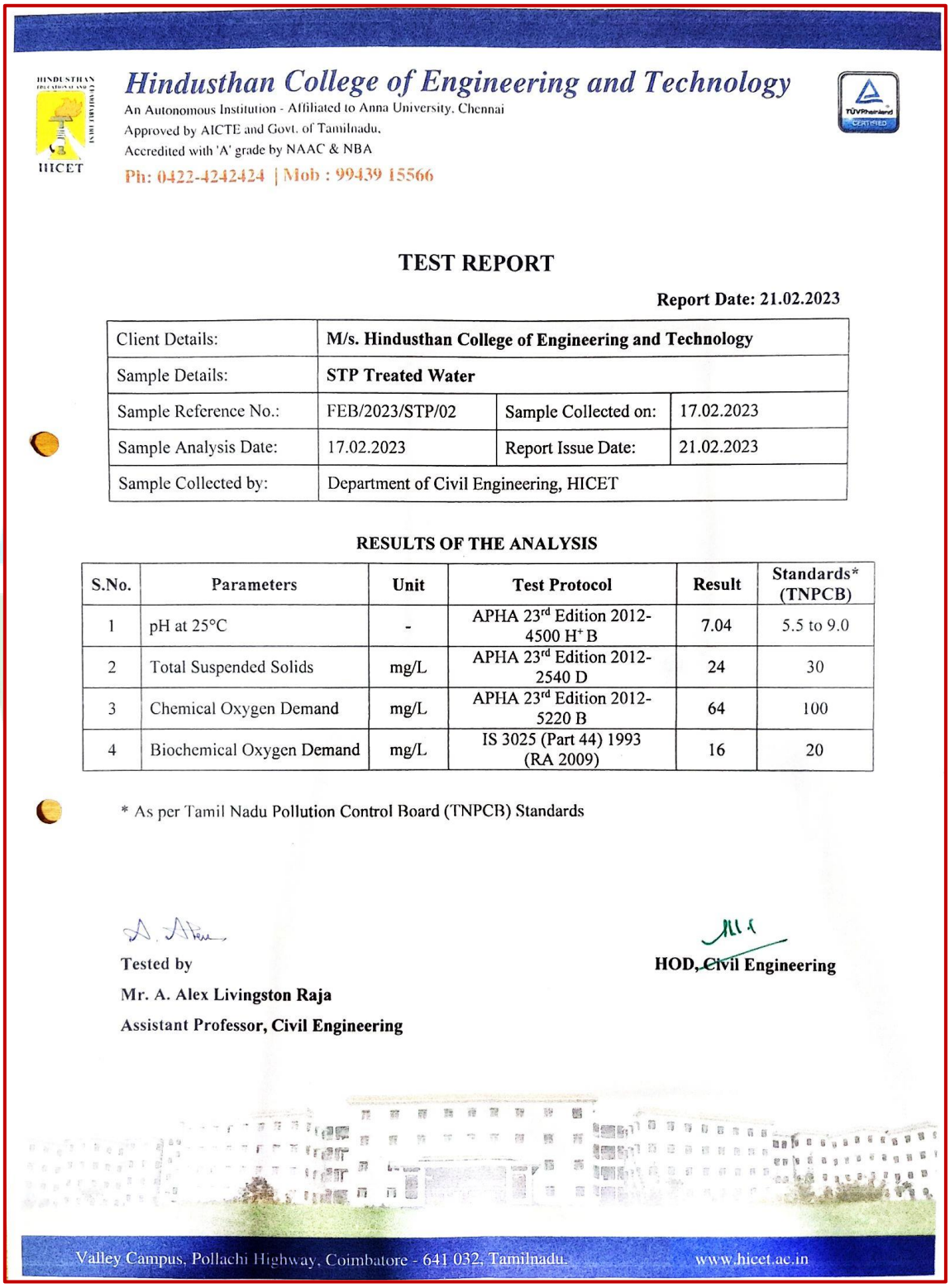
Filter Feed Tank (Capacity 40KL) and Filter Feed Pump

Dual Media Filter

6.3.2 Does your university as a body have processes to prevent polluted water entering the water system, including pollution caused by accidents and incidents at the university?

Yes, the institution has established comprehensive processes to prevent polluted water from entering the water system, including pollution resulting from accidents or incidents. A key aspect of these processes involves the use of spill containment systems and regular monitoring of water sources across the campus. The wastewater treatment plant is equipped with advanced systems to ensure that only treated and non-polluted water is released back into the environment. The quality of treated wastewater is tested on a monthly basis to ensure that the quality parameters are within the limits prescribed by Tamil Nadu Pollution Control Board (TNPCB). Strict guidelines are followed to handle chemicals and hazardous materials within laboratories and other areas, minimizing the risk of contamination. In the event of an accident or spill, immediate response protocols are in place to contain and treat the affected water, ensuring it does not enter the broader water system. Regular staff training and audits are

conducted to ensure compliance with environmental safety standards, further safeguarding water resources. Through these measures, the institution actively prevents pollution and protects water quality.



Hindusthan College of Engineering and Technology

An Autonomous Institution - Affiliated to Anna University, Chennai
Approved by AICTE and Govt. of Tamilnadu,
Accredited with 'A' grade by NAAC & NBA
Ph: 0422-4242424 | Mob : 99439 15566

HICET

TEST REPORT

Report Date: 21.02.2023

Client Details:	M/s. Hindusthan College of Engineering and Technology		
Sample Details:	STP Treated Water		
Sample Reference No.:	FEB/2023/STP/02	Sample Collected on:	17.02.2023
Sample Analysis Date:	17.02.2023	Report Issue Date:	21.02.2023
Sample Collected by:	Department of Civil Engineering, HICET		

RESULTS OF THE ANALYSIS

S.No.	Parameters	Unit	Test Protocol	Result	Standards* (TNPCB)
1	pH at 25°C	-	APHA 23rd Edition 2012-4500 H^+ B	7.04	5.5 to 9.0
2	Total Suspended Solids	mg/L	APHA 23rd Edition 2012-2540 D	24	30
3	Chemical Oxygen Demand	mg/L	APHA 23rd Edition 2012-5220 B	64	100
4	Biochemical Oxygen Demand	mg/L	IS 3025 (Part 44) 1993 (RA 2009)	16	20

* As per Tamil Nadu Pollution Control Board (TNPCB) Standards

Tested by
Mr. A. Alex Livingston Raja
Assistant Professor, Civil Engineering

HOD, Civil Engineering

Valley Campus, Pollachi Highway, Coimbatore - 641 032, Tamilnadu. www.hicet.ac.in

Treated Wastewater Quality Test Report

6.3.3 Does your university as a body provide free drinking water for students, staff and/or visitors, e.g. drinking water fountains)?

Yes. The institution has strategically placed water purifiers on its campus to ensure access to clean and safe drinking water. These water purifiers are designed to provide treated drinking water, ensuring that students, staff, and visitors have easy access to high-quality water throughout the day. The placement of the purifiers is carefully planned to serve high-traffic areas such as academic buildings, hostels, and common areas, ensuring maximum accessibility. By addressing the importance of hydration and water quality, the institution demonstrates a commitment to fostering a healthy environment. This initiative not only promotes the well-being of individuals but also reduces the need for bottled water, aligning with sustainable practices by minimizing plastic waste.

Water Filter

6.3.4 Does your university as a body apply building standards to minimise water use? (relevant standards to be indicated)

Yes. The institution applies building standards aimed at minimizing water use, focusing on sustainable water management across campus infrastructure. Key initiatives include the installation of rainwater harvesting facilities that capture and store rainwater for non-potable uses like irrigation and flushing, reducing dependency on external water sources. The campus utilizes water metering to monitor and track water consumption, helping to identify inefficiencies and encouraging responsible water use. Automatic water level controller is installed in overhead water tanks to regulate water levels, preventing overflow and optimizing the use of stored water. Push-fit taps are installed in water filters and restrooms to prevent water wastage by controlling the flow and ensuring proper shut-off. For landscaping, sprinkler and drip irrigation systems are employed, targeting water directly to plant roots, minimizing evaporation and runoff. The campus also conducts regular maintenance for leak prevention, with periodic inspections and repairs to detect and fix leaks promptly, ensuring that water is used efficiently and no resources are lost. These measures align with environmental sustainability goals and promote water conservation.

Rainwater Harvesting Pits

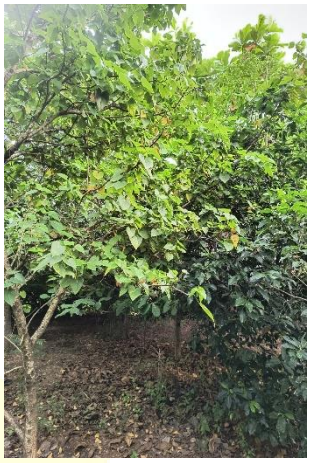
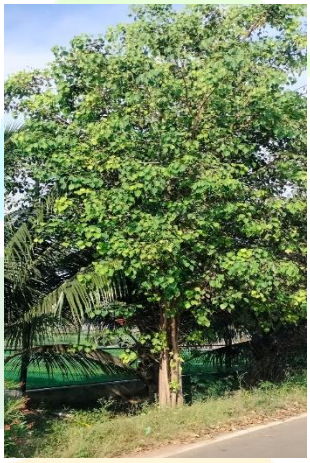
Drip Irrigation

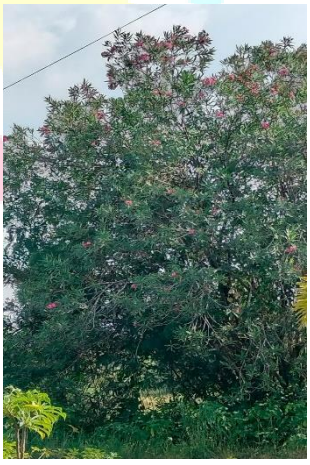
Sprinkler Irrigation

6.3.5 Does your university as a body plant landscapes to minimise water usage? (e.g. use drought-tolerant plants)

Yes, the institution actively incorporates sustainable landscaping practices to minimize water usage. The landscape planning focuses on selecting drought-tolerant plants that require less water while thriving in the local climate. Native plants are prioritized, as they are well-adapted to the region's conditions and often require less maintenance, reducing both water and nutrient inputs. The rainwater harvesting systems in the campus are integrated to collect runoff for use in irrigation, further conserving potable water. The use of efficient irrigation systems, such as sprinkler and drip irrigation, helps retain moisture in the soil, reducing water evaporation. These measures collectively contribute to a more sustainable campus environment while minimizing the ecological footprint of campus.

The total number of matured trees (greater than 10 years old) is about 1435. Some of the trees are shown in the following images.

		
Azadirachta indica	***Ravenala madagascariensis***	***Thespesia populnea***
		
Ficus religiosa	***Millingtonia hortensis***	***Terminalia catappa***
		
Bambusa vulgaris	***Ficus benghalensis***	***Cocos nucifera***

		
Millettia pinnata	***Palm Tree***	***Couroupita guianensis***
		
Delonix regia	***Casuarina cunninghamiana***	***Ficus auriculata***
		
Samanea saman	***Leucaena leucocephala***	***Nerium oleander***

Trees in the Campus

6.4 WATER REUSE

6.4.1 Does your university as a body have a policy to maximise water reuse across the university?

Yes. The link to the policy document from the institution website is given below.

Policy created: 2022

Policy revised: -

https://hicet.ac.in/aqar/Policy%20Documents/HiCET-Water-Management-Policy.pdf

6.4.2 Does your university as a body measure the reuse of water across the university?

No.

6.5 WATER IN THE COMMUNITY

6.5.1 Does your university as a body provide educational opportunities for local communities to learn about good water management?

Yes. The institution actively engages with local communities to promote awareness and education on sustainable water management practices. Through various outreach initiatives and community-focused programs, the institution organizes workshops, seminars, and awareness campaigns that highlight the importance of water conservation and efficient management techniques. The institution also collaborates with local authorities and environmental organizations to provide resources, training, and hands-on experiences to community members. HiCET integrates water management topics into its academic curriculum, allowing students to engage in practical projects that benefit both the institution and surrounding communities. These efforts are part of the college's commitment to fostering a sustainable and environmentally-conscious society.

SAMPLE EVIDENCE

Educating Farmers on Government Subsidies and Good Water Management

The Department of Agricultural Engineering, Hindusthan College of Engineering and Technology, Coimbatore, organized an outreach program for farmers in and around Malumichampatti on 04.08.2022. The event was held at the Mahakali Amman Kovil, Malumichampatti. A total of 55 students and 3 faculty members participated in this activity.

During the program, students interacted with 35 local farmers, along with officials from the Department of Horticulture and the Department of Agricultural Engineering, Coimbatore. Mrs. Begum Firthhouse, Horticultural Officer, provided an informative session on various government schemes and subsidies available to farmers, as well as the procedures to access them. Following this, a social and water resources mapping exercise was conducted to raise awareness among farmers about the resources available in their locality and the current status of those resources.

Farmers were also asked about the challenges they face in their fields, with the aim of addressing these issues through student-led projects, such as the design of innovative farm equipment and automated irrigation systems. A structured questionnaire was distributed to gather information on the current status of groundwater potential in the region. Modern agricultural technologies, including ICT, IoT, Drones, Remote Sensing, GIS, and relevant mobile apps, were introduced to the farmers to highlight their benefits in enhancing agricultural practices.


GPS Map Camera
Malumichampatti, Tamil Nadu, India
VXRR+3CJ, Hindusthan College Rd, Malumichampatti, Tamil Nadu 641050, India
Lat 10.890144°
Long 76.991058°
04/08/22 11:30 AM
Nigeria
Google


GPS Map Camera
Malumichampatti, Tamil Nadu, India
Malumicham Patti Panchayat Union School, Palanisamy Nagar, Malumichampatti, Tamil Nadu 641021, India
Lat 10.906129°
Long 77.003235°
04/08/22 12:58 PM
Golf Club Rd
Google

Photographs from the Outreach Activity

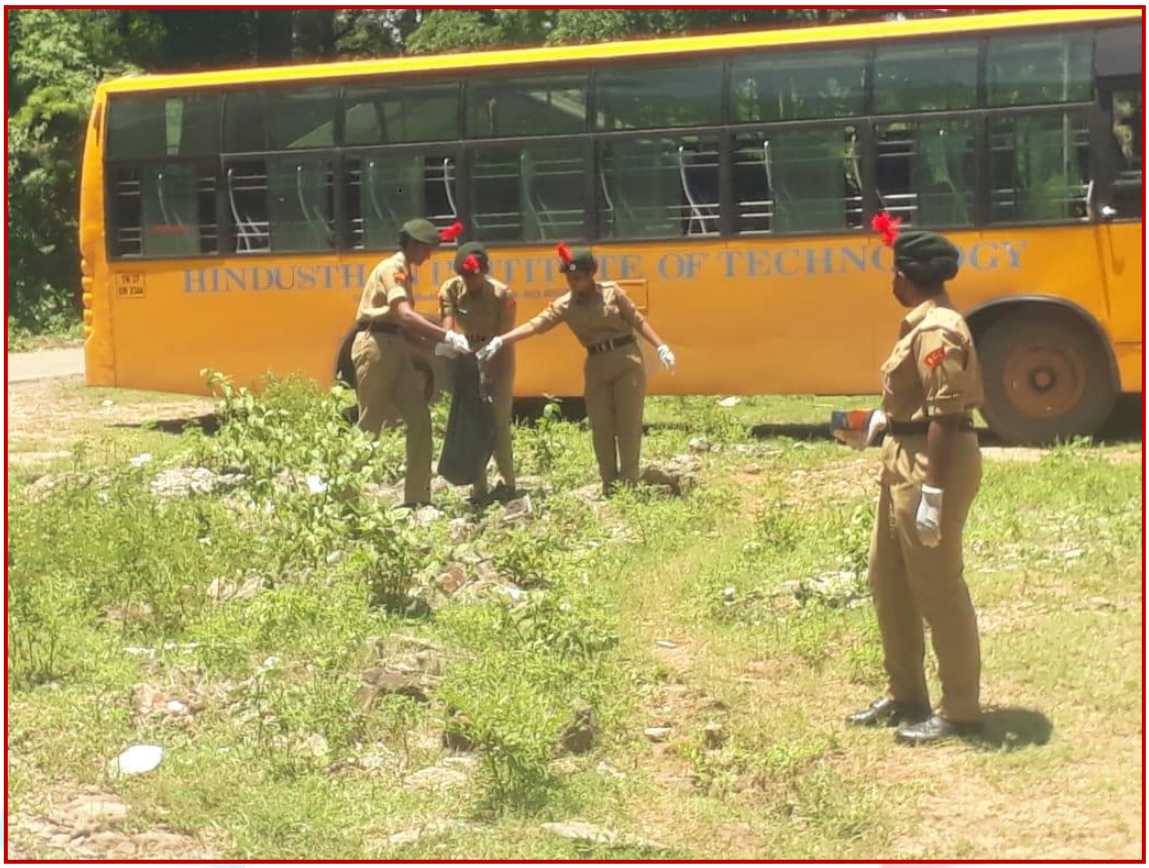
6.5.3 Does your university as a body support water conservation off campus?

Yes. The institution actively supports water conservation off-campus through multiple initiatives that aim to benefit both local communities and the environment. The institution works with local authorities, NGOs, and community organizations to raise awareness about water conservation and sustainable usage practices. HiCET organizes workshops and seminars that educate the public on topics like water recycling, rainwater harvesting, and reducing water wastage in daily activities. Students and faculty also volunteer for various environmental projects, contributing their time and expertise to help implement water-saving solutions. The college has been instrumental in advocating for the use of water-efficient appliances, encouraging the adoption of sustainable water management practices in nearby communities. HiCET also promotes water conservation in local schools, fostering a culture of sustainability from an early age. These efforts reflect the institution's commitment to water conservation beyond its campus, aiming to make a lasting impact on the surrounding region.

SAMPLE EVIDENCE

Cleaning of Water Bodies

The Puneeth Sagar Abhiyan – Cleaning of Water Bodies was a regional-level event held on 16th September 2022 at Valayar Dam, organized by the NCC 2(TN) Air Sqn NCC and 2(TN) CTC NCC cadets. The event aimed to observe World Ocean Day and celebrate the 75th anniversary of India's independence by promoting the importance of preserving water bodies. A total of 65 cadets and 2 Associate NCC Officers actively participated in the cleaning activity. The event was funded by the management, and there were no registration charges for the participants. The cadets demonstrated enthusiasm and dedication while contributing to the cleanliness of the water body, reinforcing the significance of environmental conservation. The event was a resounding success, with positive feedback from the participants, showcasing their commitment to sustainability.



Photographs from the Outreach Activity

6.5.4 Does your university as a body, where water is extracted (for example from aquifers, lakes or rivers), utilise sustainable water extraction technologies on associated university grounds on and off campus?

Yes. The institution emphasizes sustainable water extraction practices both on and off campus. The institution utilizes rainwater harvesting systems across campus to collect and store rainwater, reducing reliance on external water sources. This harvested water is primarily used for landscaping, flushing, and non-potable purposes, which minimizes the demand on aquifers and local water bodies. HiCET has implemented water-efficient technologies like low-flow fixtures in toilets and drip irrigation systems with to reduce wastage. The college also encourages the use of recycled water for various campus activities. Off-campus, the institution collaborates with local communities to promote awareness about sustainable water use and conservation. Regular monitoring of water extraction and usage ensures adherence to sustainable practices, reducing environmental impact while maintaining water availability for future needs.

6.5.5 Does your university as a body cooperate with local, regional, national or global governments on water security?

Yes, the institution collaborates with local, regional, and national governments to promote water security. The institution actively participates in government-led initiatives focused on sustainable water management and conservation. At the local level, HiCET works with municipal authorities to support water conservation efforts, including rainwater harvesting and the implementation of water-efficient technologies. Regionally, the college engages in awareness campaigns organized by state agencies that emphasize the importance of safeguarding water resources and addressing challenges like water scarcity. Nationally, HiCET aligns with government programs such as the Jal Shakti Abhiyan, which promotes water conservation and management across India. Additionally, the college participates in global dialogues on water security, collaborating with international organizations and academic bodies to explore innovative solutions and share best practices for sustainable water use. Through these partnerships, HiCET contributes to the broader goals of water security and environmental sustainability.

SAMPLE EVIDENCE

Event Summary: Mission Amrit Sarovar – Jal Dharohar Sanrakshan Initiative

In celebration of India's 75th Independence anniversary, the Ministry of Housing and Urban Affairs (MoHUA), in collaboration with the Ministry of Education (MoE) and the All India Council for Technical Education (AICTE), launched the Mission Amrit Sarovar – Jal Dharohar Sanrakshan initiative. The aim of this mission is to understand and address the unique challenges associated with the protection, preservation, and rejuvenation of 300+ traditional water bodies of cultural and historical significance, identified across the country, to promote water security and support community development.

Internship: Protection, Preservation and Rejuvenation of the Stepped Well at Palakkad Fort

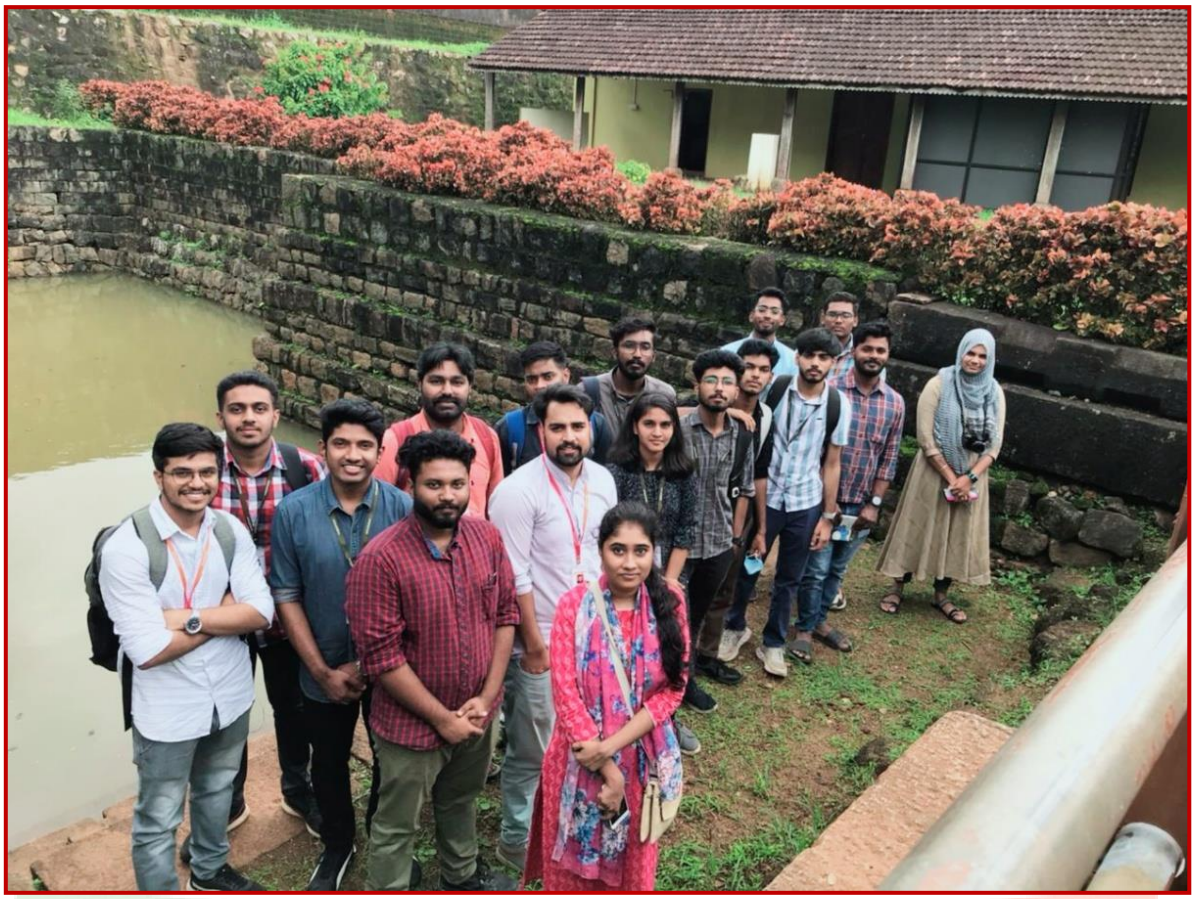
Under this initiative, the Stepped Well at Palakkad Fort, Kerala was designated to Hindusthan College of Engineering and Technology, Coimbatore. 15 students from the Department of Civil Engineering have undergone an internship from 16.07.2022 to 05.08.2022 and carried out an in-depth study on the water site. The scope of the study included:

- Documenting the Historical and Cultural Significance of Palakkad Fort
- Geo-Tagging Key Locations
- Photographic and Videographic Documentation
- Spatio-Temporal Analysis and Digital Elevation Modeling
- Hydrological Studies and Catchment Area Conservation
- Contour Mapping and Drainage Pattern Analysis
- Water Quality Testing and Analysis
- Reimagining the Area as a Vibrant Public Space
- Recommendations and Action Plan for Rejuvenation
- Spreading Awareness among the Community

Mr. A. Alex Livingston Raja, Assistant Professor of Civil Engineering was nominated as the Institute Nodal Officer (INO). Funds worth of Rs. 2,00,000 /- (Rupees Two Lakh Only) was sanctioned by the AICTE for providing stipends for the interns, INO and for other related expenses. Ms. M. Muhsina, Senior Conservation Assistant, Archaeological Survey of India (ASI), Palakkad Fort and Ms. K. V. Abha, Assistant Engineer, Palakkad Municipality were assigned as mentors for this study.

As part of this mission, the study's deliverables and outcomes were submitted and displayed through posters, photographs, maps, and reports on the Government of India Portal. The deliverables were also showcased for spreading awareness among the local community and general public at the 75th Independence Anniversary exhibition organized by the ASI at Palakkad Fort, held from 12.08.2022 to 20.08.2022.

The Stepped Well at Palakkad Fort



Group Photo of the Team at Palakkad Fort

Inauguration of the Poster Exhibition at Palakkad Fort

6.5.6 Does your university as a body actively promote conscious water usage on campus?

Yes, the institution actively promotes conscious water usage on campus through a range of sustainable practices. The college has implemented rainwater harvesting systems across its buildings, which help capture and store rainwater for various uses, reducing dependency on external water sources. Water-saving fixtures have been installed to lower daily water use and reduce pressure on the pipes. HiCET also promotes water recycling and reuse; wastewater from hostels and academic buildings is treated and repurposed for landscaping and other non-potable uses, helping conserve fresh water. Additionally, the campus community, including students, staff, and faculty, participates in awareness campaigns highlighting the importance of water conservation, such as "Save Water" workshops and eco-friendly events.

6.5.7 Does your university as a body actively promote conscious water usage in the wider community?

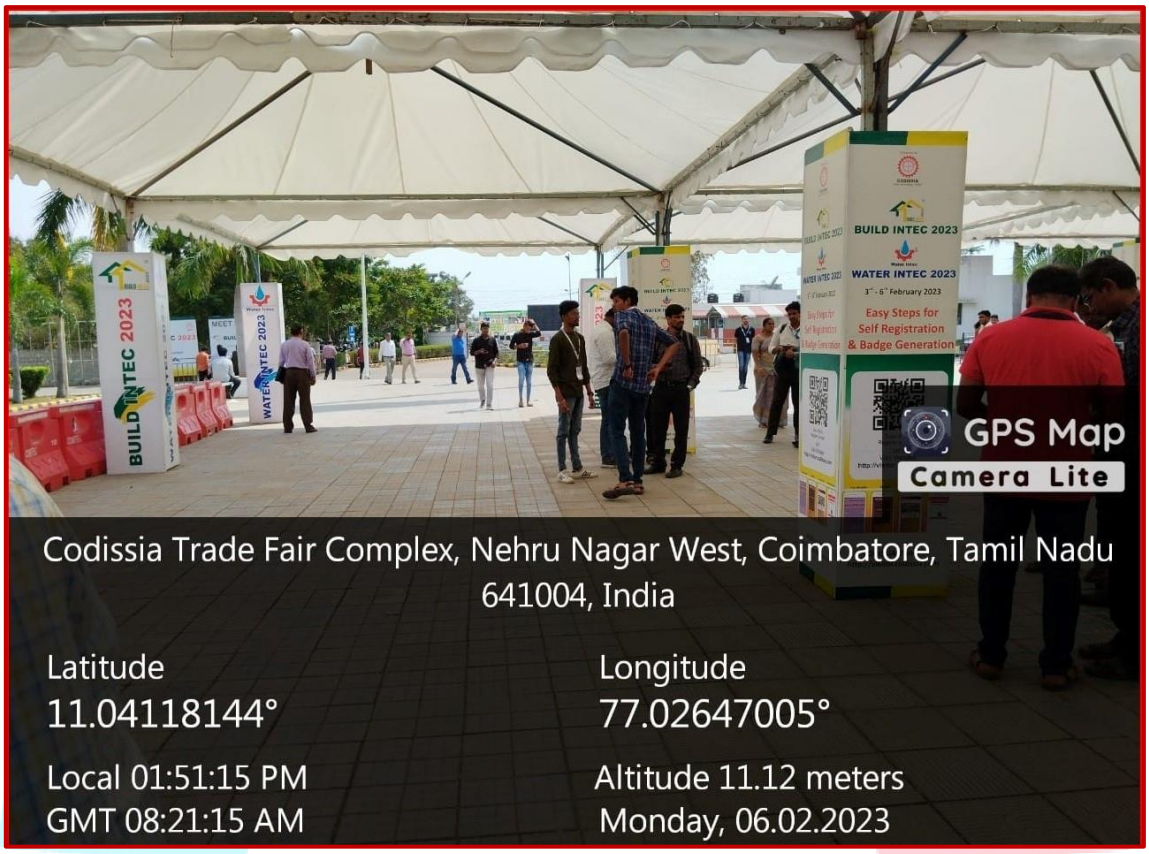
Yes, the institution actively promotes conscious water usage beyond campus through community engagement and awareness initiatives. The college organizes outreach programs in collaboration with local authorities, educating the public on sustainable water practices such as rainwater harvesting, wastewater recycling, and efficient water use in households. HiCET also conducts workshops and seminars for nearby schools, businesses, and residents, emphasizing simple yet effective conservation methods like fixing leaks and reducing wastage. Students and faculty participate in community projects focused on environmental sustainability, often involving practical demonstrations and distribution of informative materials to encourage water-saving habits. These efforts reflect institution’s commitment to environmental stewardship, as it strives to make a positive impact on water conservation within the broader community while fostering a culture of sustainability and awareness.

SAMPLE EVIDENCE

Water Intec 2023

The students of the Department of Civil Engineering at Hindusthan College of Engineering and Technology participated in the 12th edition of Build Intec and the 3rd edition of Water Intec, held from February 3rd to 6th, 2023, at the CODDISIA Trade Fair Complex in Coimbatore. A total of 91 students, along with 3 faculty members, represented the department at this prestigious event. Build Intec is a major exhibition and conference focused on construction and building materials, while Water Intec emphasizes solutions for water treatment and management.

These events provided an invaluable platform for students to engage with industry experts, explore the latest innovations, and enhance their practical knowledge of civil engineering and water management technologies. The event also facilitated networking opportunities, broadening the students' exposure to the latest trends and challenges in the industry, while fostering their professional growth. The participation of both students and faculty members showcased the department's commitment to continuous learning and industry engagement.



Photographs from Water Intec 2023