



ABOUT ZIAUDDIN UNIVERSITY



ZU_SUSTAINABILITY REPORT 2022-2023

Sir Dr. Ziauddin Ahmad left a lasting impact on the subcontinent. He was an eminent educationist, scholar, visionary and inspiration to many. Born in 1873 in Meerut, India, his success story began at the age of 12 when he attained First Division in high school. Dr. Ziauddin also received a Lang medal along with a government scholarship at Aligarh M.A.O College. In 1895 he secured First Position in Bachelor of Arts (B.A) and received the coveted Shachey Gold Medal at Aligarh M.A.O College. After completing B.A in Mathematics, Dr. Ziauddin Ahmad was appointed as the assistant lecturer in Aligarh M.A.O College – the same institute that enabled him to take his passion further. He then attained a Master of Arts (M.A) degree from the University of Calcutta. In 1901, he achieved a Doctor of Science (D.Sc. degree in mathematics from the University of Allahabad. He then enrolled himself in the Trinity College at Cambridge University and achieved the prestigious Sir Isaac Newton scholarship - an honor no other Indian had attained. With a PhD in Mathematics, Dr. Ziauddin Ahmad aspired to raise the standard of education within the subcontinent. He also worked as an Assistant Secretary for the Sir Syed Memorial Fund. Since he was inspired by Sir Syed Ahmad Khan's approach towards modern tutelage, he dedicated himself to creating a liberal teaching system for the Muslims of India. Dr. Ziauddin was appointed as the very first Pro-vice chancellor of Aligarh Muslim University. He took over as vice-chancellor in 1935. On December 23, 1947, his journey of spreading literacy, higher education, and the ability to critically analyse information came to an end. He was buried beside Sir Syed Ahmad Khan in the Aligarh Muslim University Mosque premises, thus fulfilling his pledge of serving Aligarh for life.

SUSTAINABILITY REPORT 2022-2023



Ziauddin University Striving Efforts for Sustainability

To be recognized as the icon of the innovative, leading-edge educational institute that endeavors to international sustainability efforts for the Environment, Economy, and Equity.

Ziauddin University represents its firm commitment to become a Sustainable & Internationally acclaimed educational entity, hence its Quality Enhancement Cell does its utmost to work on all essential criteria to represent the University in Green metric Ranking.

Sustainable University in a Changing World: Lessons, Challenges and Opportunities

- It contributes to academic discourses on sustainability in education and the greening of campus.
- It promotes university-led social change regarding sustainability goals and as a tool for self-assessment on-campus sustainability for higher education institutions (HEIs) around the globe.
- It will be evident to inform governments, international and local environmental agencies, and the society about sustainability.
- It is based on the concept of Environment, Economy & Impartiality to achieve development goals.
- It is devised to help the university for internalization, recognition benefit, and to address global challenges.

Benefits of Sustainability

- Internationalization and Recognition
- Increased Awareness of Sustainability Issues
- Social Change and Action
- Networking
- Environment Friendly

Save Earth Save Life



Sustainability, by definition, is at the intersection of economic, social and environment interests.

1. Setting and Infrastructure (SI)

Number of Campus Sites:

Ziauddin University is one of the renowned universities of Pakistan. Initially it was a medical university but with the period of time it expanded in the various fields of studies and now falls in the category of general university. It was established in 1995 and it is located in 5 sites of Karachi and 1 in Sukkur in the province of Sindh, Pakistan. Link road site is a modern purpose-built campus with free transportation services for students and staff. All sites are energy efficient and environment friendly. Ziauddin University is well reputed in parting with quality education and expanding across the country and province. Therefore, Ziauddin University established its campus in Sukkur. Sukkur campus also meets all the criteria of a smart campus as green and clean campus is the motto of ZU. ZU has also opted another land of 82312- sq.m at Islamabad, province of Punjab and capital of Pakistan for their future expansion So, the Total Land of Ziauddin University is about **470227.16-meter sq.**



Ziauddin University Clifton Site

4/B Shahrah-e-Ghalib Rd, Block 6 Clifton, Karachi, Sindh, Pakistan.



Ziauddin University North Site
F-103, Block-B Block B North Nazimabad Town, Karachi, Sindh, Pakistan.



Ziauddin University Kemari Site



Plot No. 33, Behind KPT Hospital, Kemari, Karachi, Sindh, Pakistan.



Ziauddin University Linkroad Site
EDUCATION CITY, Link Road, Gadap Town, Karachi, Sindh, Pakistan



Ziauddin University Sukkur Campus
Village Dreha, Shikarpur Road, Sukkur, Sindh, Pakistan.

No. of Campus Setting: Urban

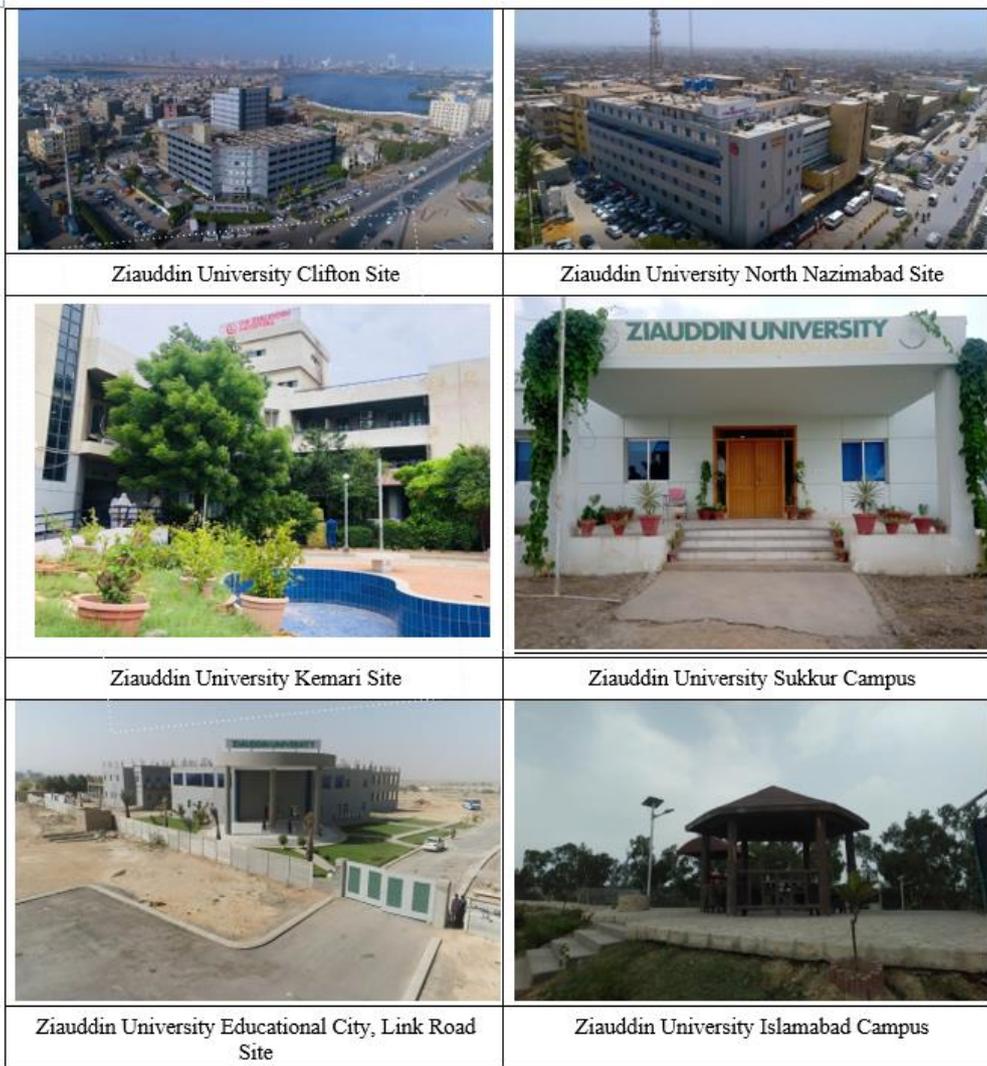
Ziauddin University is a specialized higher education institution and has 4 multi-regional sites in Karachi and 1 campus in Sukkur and 1 campus in Islamabad. The campus setting of Ziauddin University is urban.

Infrastructure of Ziauddin University is designed in a sustainable way. Campuses are constructed in eco and environment friendly manner such as open court, Air ventilation system that helps usage of daylight the most or efficient use of natural resources.

- Campuses are built purposely pedestrian friendly to reduce carbon emission and prevent pollution.
- All the campuses are aligned with smart implementation of appliances such as LED, solar panels, LED Lighting, Inverters, RO Plants, water and waste recycling programs etc.

Sustainable infrastructure of Ziauddin University supports day to day functions and assists in integrating the natural environment.

- Total Campus Area of Ziauddin University is **470227.16** square metre.
- Total Campus ground floor area of buildings (m²) is **46298.55** square metre.
- Total Campus building Area of Ziauddin University is **145510.18** square metre.
- Ratio of open space towards total area: **90.15%**



Total Area on Campus Covered in Forest Vegetation (meter²):

Ziauddin University is highly focused on green implementation that is why they have developed a horticulture department who is responsible for forest vegetation, planted vegetation and green house plantation etc. They are working day and night to make the environment clean and green. They also make collaboration of ZU with Sindh Forest Department (SFD) which is under the Green Pakistan Programme for Urban Forest Tree Plantation. In this Collaboration SFD will provide environment friendly plants, labor and technical assistance, guidelines and protection of provided plants to the land of Ziauddin University Link Road Site. Ziauddin University is providing their land for the plantation on a large scale. ZU will provide water and proper maintenance to Urban Forestry Plantation.

- The total forest vegetation area at Ziauddin University: **172022.20 m² = 36.58%**



Urban Forest Area plantation in Collaboration with Sindh Forest Department





Ziauddin University Urban Forest Vegetation Area

- Total planted vegetation area covered at Ziauddin University is **142398.39 m²** that is a total of: **30.28 %**



Planted Vegetation Area Ziauddin University

- The total area on campus for water absorption besides forest & planted vegetation is **109508.02 m²** that is around **23.29 %**.





Total area on campus for water absorption besides the forest and planted vegetation

- Total estimated Population of Ziauddin University is more than 7000 including employees and Students. Hence, total open space divide by total campus population is **> 55 m²/person**.
- As infrastructure is central to sustainable development therefore, to meet the requirement of sustainable equipment and system the average percentage of University's budget for sustainability effort is **16.41 %**.
- Percentage of Operation and Maintenance activities during a year is **100%**.

Operation & Maintenance Activities during a Year:



Operations & Maintenance Activity at ZU North Site



Operations & Maintenance Activity at ZU Link road Site



Solar Panel Cleaning & Maintenance at Ziauddin Sukkur Campus



Solar Panel Cleaning & Maintenance at ZU-KDLB Site



Operations & Maintenance Activity at ZU Sukkur Campus



Split ACs cleaning & Maintenance service at ZU Clifton Site



Street Light maintenance activity at ZU Clifton Site



Windows repairing & Painting at ZU Clifton Site

Solar Structure Paint Work at at ZU Clifton Site



Waste Water Treatment at Clifton Site





Operations & Maintenance Activity at ZU KDLB Site

Example of **operation and maintenance activities at Ziauddin University during a year**

Campus facilities for disabled, special needs and or maternity care

Ziauddin University provides the following facilities for disabled, special needs and/or maternity care. These are as follows:

- Wheelchair Ramps available at each building for disabled people to easily commute to and from the campus.
- Elevators are especially helpful for people who need assistance going up and down.
- Girls Common room is a private room for female staff who are breastfeeding and can pump breast milk in private.
- A Baby Day Care facility is available to assist female employees to provide a safe, secure and caring environment to their infants.
- Maternity Facility available for female employees and also the wives of male employees.



Wheelchair Ramps

6.3 PART C – MATERNITY BENEFITS

- 6.3.1 Maternity benefits will be entitled after completion of one-year service to female staff and wives of male staff (referred to the categories mentioned in point.4. ELIGIBILITY).
- 6.3.2 Live or still birth after 28 weeks of pregnancy will be considered as maternity benefits. Two miscarriages will be considered in maternity benefits.
- 6.3.3 Only the three deliveries & two miscarriages (normal or surgical) will be included. Fourth birth and third miscarriage are not entitled, even if facilities were not availed in maternity cases before.
- 6.3.4 After the three deliveries and two miscarriages - all other treatments & diagnostic tests (laboratory and radiology) are allowed; **but except of any maternity/deliveries related matters.**
- 6.3.5 If any new-hired employee is already having children, he/she is also eligible to avail the Maternity benefits as per the Organizational policy mentioned in 6.3.2.
- 6.3.6 In case of any twins, triplets etc. – one time delivery is considered.



Maternity Benefits Policy

Elevators



Girls Common Room



Baby Day Care Facility



Example of Campus facilities for disable, special needs and or maternity care at Ziauddin University

Security and safety facilities

Ziauddin University provides the following safety and security facilities for each campus and at each site.

- Walk through Scanner is installed at Entrance to avoid any danger at the beginning
- Hand Scanners are provided at Entrance & Parking for brief checking.
- CCTVs are installed at Entrance Outside and all the corners of the buildings and at each floor.
- 24/7 CCTV & Fire monitoring rooms operating with fully trained and certified firefighters to immediately respond and overcome the situation in less than 10 minutes
- Fire Panels and fully equipped tools and equipment are readily available in stock.
- Emergency online number 4999 is also available with certified personnel to immediately cope the situation.
- Emergency rooms are available with on time Doctor Consultancy.
- VHF Sets provided to security guards & security officers for quick communication.
- A Passive Fire Extinguisher System is installed in the overall university.
- Smoke Detectors are installed at Each Room & at each floor of university.
- Policy on fire safety is available with Proper SOPs mentioned and revised yearly as per update and requirements.
- Fire safety training and Drill (Demo) conducts several times to train all the employees and staff for emergency situations. In 2022, trainings were conducted at 10th Feb, 17th Feb, 24th May, 21st June and 21st July to cater all the departments of Ziauddin Group.
- Ziauddin University has Collaborated with Sindh Government Rescue for providing security to University’s staffs, students and their nearby residents to immediately provide rescue and first aid against any emergency situation such as crime, accidents, fire and natural calamities etc.



Walk through Scanner at Entrance



Hand Scanner at Entrance & Parking



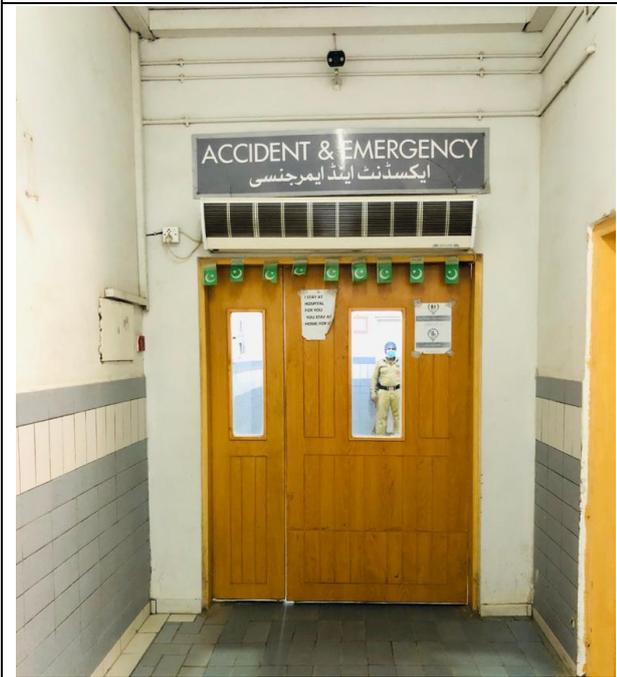
CCTV at Entrance Outside and all the corners of the buildings and at each floor



CCTV Monitoring Room



Fire Equipments



Emergency Room



VHF Sets for quick communication



Fire Panel



Fire Extinguisher System



Smoke Detectors at Each Room & Floor

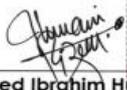


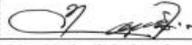
ISO 9001 QUALITY MANAGEMENT

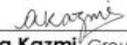
DEPARTMENT OF FIRE FIGHTING

SYSTEM FOR FIRE PREVENTION AND SAFETY

Document No. : DZHN/FF/FP&S/PR 01
 Original Issue Date : 15th July 2014
 Revision : 01
 Revision Date : 20th December 2021

Prepared By: 
Mr. Syed Ibrahim Hussain Rizvi
 Assistant Manager, Department of Fire Fighting-DZH

Reviewed By:  / 
Mr. Raja Ajaz / **Mr. Nehal Ashraf**
 Manager Security / G.M Utilities


Dr. Anila Kazmi, Group Head Dept. of Quality Assurance -DZH

Approved By: 
Dr. Shireen Mansoor, Medical Superintendent-DZH

CONTROLLED DOCUMENT, Q.A.
 DR. ZIAUDDIN HOSPITAL


Fire Safety Policy



Ambulance & Fire Tender, Collaboration with Sindh Govn. Rescue For residents emergency & Safety



Fire Safety Training to employee & staff

Health infrastructure facilities

Health & Infrastructure facilities of Ziauddin University are as follows:

1. Ziauddin Group established the following hospitals at three sites in Karachi i.e.: Clifton, Kemari and North Nazimabad, that are as following:
 - Dr. Ziauddin Hospital, North Nazimabad Campus
 - Dr. Ziauddin Hospital, Clifton Campus
 - Dr. Ziauddin Cancer Hospital at North Nazimabad
 - Dr. Ziauddin Hospital KDLB, Keamari Campus
 - Dr. Ziauddin Memorial Hospital at North Nazimabad
 - Boat Basin Executive Clinics at Clifton



2. Ziauddin Group going to establish Dr. Ziauddin Hospital Sukkur & Dr. Ziauddin Medical Centre, Dubai in upcoming years.
3. Ziauddin University provides healthcare and medical benefits to all their academic and non-academic staff and their dependents with full coverage of IPD, OPD, Maternity, accidental and emergency care.
4. Ziauddin University also provides medical facilities to their part-time employees, retired employees, trainees and postgraduate doctors and nursing students.
5. Ziauddin University has developed a Gym & Health & wellness center for their students, staffs and faculty fitness and wellbeing.



Dr. Ziauddin Hospital Clifton



Dr. Ziauddin Hospital Kemari



Dr. Ziauddin Hospital North Nazimabad



ZU Boat Basin Rehab & Executive Clinics



ZU Gym and Health and Wellness Centre

| + ENTITLEMENTS | x EXCLUSIONS |
|---|--|
| <p>Hospital will provide facilities for consultations, normal investigations to the employees and their dependents in the following manner:</p> <p>OUTDOOR TREATMENT:</p> <ul style="list-style-type: none"> • Hospital will provide facilities of consultations and investigations • Expensive investigations such as MRI, CT scans, Angiography, thallium scans, bone scans, isotope studies, etc. will be performed after in-house consultation and MS approval • Dental treatment will be available at a subsidized rate • Medications will be available at retail price <p>INDOOR TREATMENT/HOSPITALIZATION:</p> <ul style="list-style-type: none"> • In case of hospitalization, employee or his/her dependents are entitled to free medical/surgical treatment in Dr. Ziauddin Hospital, including all diagnostic and laboratory investigations • Medications (excluding chemotherapeutic drugs for oncology patients) will be available at 50% discount • Diet will be entitled to employees only, not to dependents • Angiography procedure and disposables will be available at 50% discount • Radiation for oncology patients will be provided free of cost • Room entitlement as per hospital policy <p>MATERNITY BENEFITS:</p> <ul style="list-style-type: none"> • Female employees or spouse of male employees will be allowed free maternity treatment / delivery after completion of one year of service • Live or still birth after 26 weeks of pregnancy will be considered as maternity benefits • Only the first three (3) deliveries (normal or surgical) will be included. Forth (4th) birth is not entitled, even if facilities were not availed in the first three (3) times | <p>Dr. Ziauddin Hospital will not be liable to bear any expenses incurred by an employee or his/her dependents in connection with any of the following:</p> <p>MEDICAL PROCEDURES:</p> <ul style="list-style-type: none"> • Optic, contact lens, hearing aids and disposables • Venereal diseases and infertility • Major psychiatric illness <p>SURGICAL PROCEDURES:</p> <ul style="list-style-type: none"> • Cosmetic treatment or plastic surgery • Cosmetic dental treatment, dentures, filled in crowns, inlays made of Gold or silver • Transplant surgery • Implants • Congenital disease • Circumcision • Angioplasty stent <p>HOSPITAL SERVICES:</p> <ul style="list-style-type: none"> • Vaccination • Telephone bill for inpatients • Blood products • N.G. feed and supplement • Pampers, pads and dignity sheets • Toiletries • Test performed at locations other than Dr. Ziauddin Hospital • Nuclear Medicine doses <p>SPECIAL SITUATIONS:</p> <ul style="list-style-type: none"> • Treatment of injury, sickness resulting from alcoholism, drug addiction, suicide attempts, fights or participation in civil commotions |
| Medical Benefits | |

Conservation facilities

The Conservation facilities of Ziauddin University are as follows:

1. Animal Farm at Link Road site, Currently Camels, Buffalos and goats are in the ZU Family and more additions will be in the future.
2. A Conservation Area for Fish Pond at Ziauddin University is in process.
3. Greenhouse for planting vegetables and baby plants at Ziauddin University, Sukkur campus and Link Road Site.
4. Ziauddin University has collaboration with Sindh Forest Department (SFD) which is under of Green Pakistan Programme for Urban Forest Tree Plantation
5. Fruits and Vegetables farming at Orchard Area of Ziauddin University Sukkur Campus and Link Road Site, Karachi.



Conservation: Animal Farm at Ziauddin Link Road Site



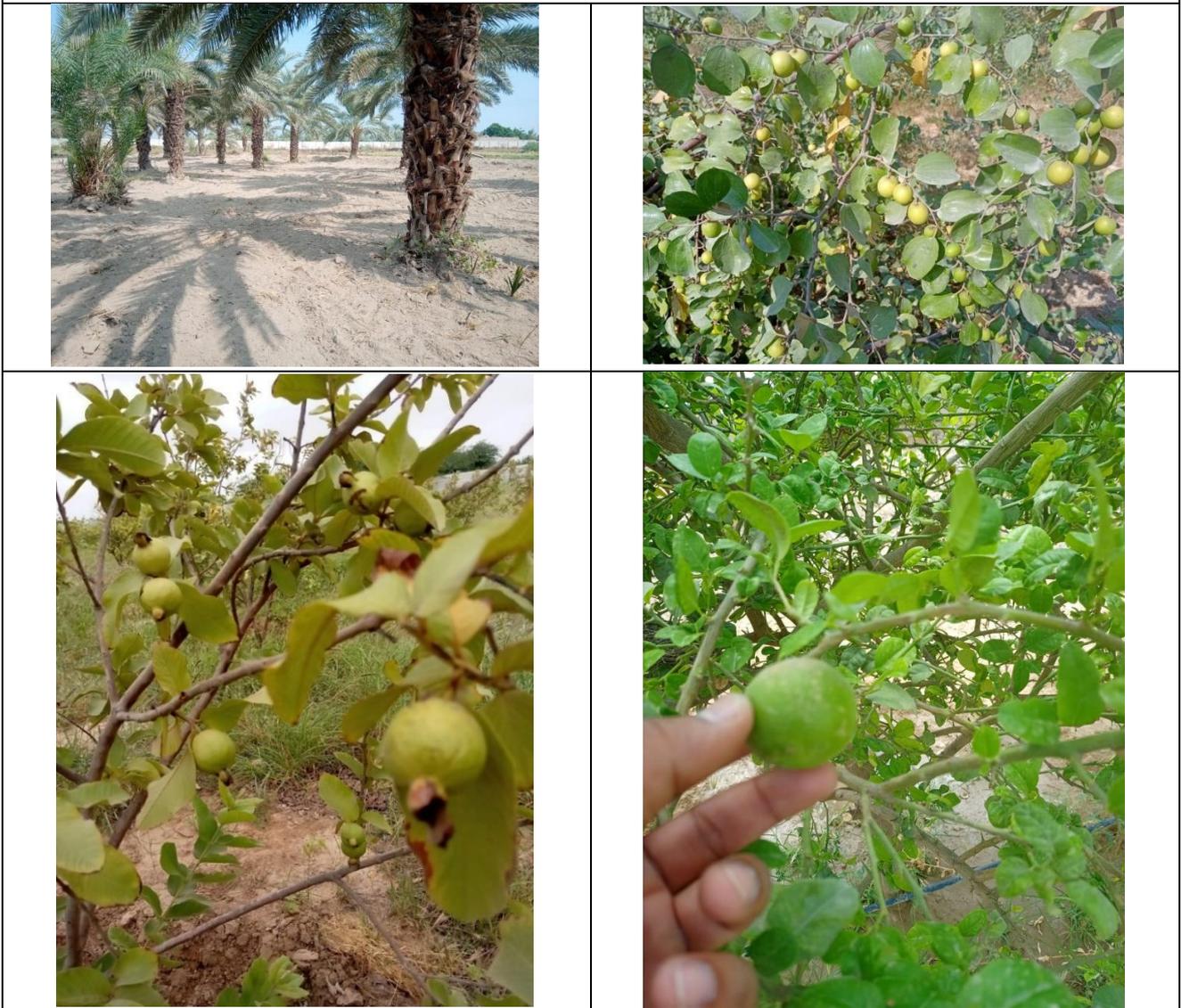
Conservation: Ziauddin University Fish Pond of Ziauddin University



Conservation: Green house plantation of Ziauddin University



Urban Forest Area at Ziauddin Link Road Site



Orchard Area (Fruits and Vegetables Farming) at Ziauddin Link Road & Sukkur Campus

2. Energy & Climate Change (EC)

- Ziauddin University implemented energy efficient appliances in the entire University, to be recognized as the icon of the innovative, leading-edge educational institute that endeavors to international sustainability efforts for the Environment, Economy, and Equity.
- Energy efficient appliance usage is **>75%** at Ziauddin university.
- Smart building implementation is also **>75%** at Ziauddin university.
- Number of renewable energy resources are solar power, Diesel Generator, Gas Generators, combined Cooling, Heating & power (CCHP), Co-Generation, Hot Water Supply and 2x300 Tons Absorption Chiller which are implemented at Ziauddin university.
- The energy efficient appliances usage included R.O plant, HVAC, smart Heat Exchanger, centralized cooling system, Splits/ AC Inverters, LED lights, Energy Savers and many other equipment for minimizing the electrical energy consumption in the campus.
- Ziauddin University also implemented the three elements of ‘green building’ Interior Open Court, Internal Landscape & Air Ventilation System & Solar System to minimize Energy consumption on LED & HVAC by using Natural Air & maximum Sunlight in daylight.

| | |
|---|--|
|  |  |
| <p>LED Lighting</p> | <p>Ceiling Fans and HVAC</p> |
|  |  |
| <p>Centralized Cooling System 1416</p> | <p>Elevators</p> |
| <p>Examples of Energy Efficient Appliances Usage at Ziauddin University</p> | |

Smart Building Implementation

| | |
|--|--|
| <p>Power Generation and Heat Exchanger System</p> | <p>Centralized Cooling System</p> |
|  |  |
| <p>Energy-efficient and smart appliances</p> | <p>Automation</p> |
|  |  |
| <p>Smart Safety & Security System</p> | |
|  | |
| <p>Solar Panels (Energy Efficient)</p> | <p>R.O Plant (Water Efficient)</p> |
|  |  |
| <p>Example of Smart Building Implementation at Ziauddin University</p> | |

Renewable Energy Sources in Campus

Dr. Ziauddin Group is Operating on four sources of energy Gas Generator, Diesel Generator, Solar Panels and K. Electric (federal government source). 250KW Solar Installation at Ziauddin KDLB, Kemari Site, 225 KW Solar Installation at Ziauddin University Link Road Site, Educational City and 51 KW Solar installations at ZCRS Boat Basin Clifton Site and 51 KW installed at Ziauddin University North Site. 110 KW solar installed at Ziauddin Sukkur Campus. 3 solar of 10 KW are installed at multiple sites at Ziauddin University Clifton.

Similarly, 1.2 MW gas genset, 725 KVA and 750 KVA DG Sets, 1250 KVA Diesel generator are installed at Clifton Site also there are 2 backups of 500 KVA installed at Clifton Site. Moreover, 60 KVA Diesel Generator installed at North Site. From which the distribution Unit of University and Hospital may vary according to the requirements and consumption.

The combined cooling, heating and power (CCHP) unit in Ziauddin Clifton uses diesel & Gas as fuel. The rated power of the is 300+265 Tons.

Entire Ziauddin University Building including B+G+5th Floor area of each floor 25000 Sq. ft. covered for Chiller Cooling. Hot Water provides heating for Kitchen and Bathrooms throughout the University.

Moreover, Wind Turbine project is under process at Ziauddin Link Road Site, Educational City Karachi.

The Ratio of Capacity produced (in KWH)/Year and Electricity usage (in KWH)/Year is **92.35 %**.

| | |
|---|--|
|  |  |
| <p>Co-Generation Hot Water Supply</p> | <p>2x300 Tons Absorption Chiller</p> |
|  |  |
| <p>250 KW Solar Installation at Ziauddin University KDLB, Kemari Site</p> | |



Solar Parking at Link Road Site



Solar Street Lights at Link Road Site

Solar Cafeteria at Link Road Site



225 KW Solar Installation at Ziauddin University Link Road Site, Educational City.



110 KW Solar Installation at Ziauddin University Sukkur Campus

Solar Street lights at Sukkur Campus





1.2 MW Gas Genset at ZU Clifton Site



1250 KVA DG Set at ZU Clifton Site



500 KVA two DG Sets at ZU Clifton Site for Backup



750 KVA DG Set at ZU Clifton Site



725 KVA DG Set at ZU Clifton Site

Elements of Green Building Implementation as Reflected in All Construction and Renovation Policies

Ziauddin University is striving hard to be recognized as the icon of the innovative, leading-edge educational institute that endeavors to international sustainability efforts for the Environment, Economy, and Equity. All new construction and renovation are based on the green building concept.

In the most recent construction of Ziauddin University, the link road site has open court areas for sunlight and fresh air ventilation. Optimal windows are provided for the daylights and for the minimization of LED light bulbs. Interior Open Court, Internal Landscape & Air Ventilation System, Solar System these all are examples to minimize energy consumption on LED & HVAC by using Natural Air & maximum Sunlight in daylight.

Ziauddin University also implemented the elements of ‘green building’ such as an absorption cooling plant for cooling purposes, a geothermal heat exchanger to pre-warm the outside air, solar panels for energy consumption & wind turbines are in under implementation phase etc.

Ziauddin University recycles water from the kitchen, wash basin and wuzu khana (prayer area) and uses it in plantations. Sprinkler has installed a drip irrigation system which checks and balances every drop of water and sprinkle according to the needs of plants.

Ziauddin University Is also working in the reduction of waste. Toxic, Inorganic and Organic waste Collected separately then Organic waste used for making fertilizers for plants, forest vegetation and field.



Environmentally Preferable Campus Structure: Interior Open Court, Internal Landscape, Air Ventilation System, Multiple Windows for minimum use of energy and maximum use of sunlight and fresh Air etc.



Energy Efficient Usage of Appliances: LED Lighting, Energy savers, Invertors, Ceiling Fans, Centralized Cooling System, Elevators etc.



Renewable Energy: Solar System to minimize Electricity consumption



Water Efficiency: recycling & justified use of each drop through Sprinkler (Drip irrigation System)





Waste Recycling & Compost use in Plantation & Vegetation



Green Building Infrastructure

Greenhouse gas emission reduction program

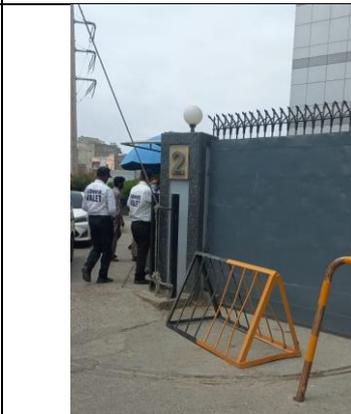
Ziauddin University is following the three **gas emission reduction programs** aimed to reduce all three scopes emissions (Scope 1, 2 and 3). These are as follows:

- **Scope 1:** University Fleet to reduce burning fuel from vehicles
 - Pedestrian Friendly Campus designed with Multiple entrances of building to reduce private vehicle inside the campus which directly reduces fuel burn from the vehicles.
 - Campus to Campus Shuttle Service to reduce carbon emission from private cars.

- **Scope 2:** Renewable Energy Sources (Solar System) is an indirect source to reduce gas emission by low energy purchased
- **Scope 3:** University Value Chain to reduce carbon emission.
 - Rideshare (Carpool) designed to encourage commuters to adopt healthy and sustainable transportation.
 - Waste Disposal at Ziauddin University

The Total Carbon Footprint (CO₂ emission in the last 12 months) at Ziauddin University is **6085.71 metric tons.**

Scope 1 Examples: University Fleet to reduce burning fuel from vehicles



1. Pedestrian Friendly Campus designed with Multiple entrances of building to reduce private vehicle inside the campus which directly reduces fuel burn from the vehicles.



2. Campus to Campus Shuttle Service to reduce carbon emission from private cars.



Scope 2 Example: Renewable Energy Sources (Solar System) is an indirect source to reduce gas emission by low energy purchased



Scope 3 Example:

1. Rideshare (Carpool) designed to encourage commuters to adopt healthy and sustainable transportation



Scope 3 Example:

2. Example of Waste Disposal at Ziauddin University

Examples of Greenhouse gas emission reduction program at Ziauddin University

Innovative program(s) in energy and climate change

| | |
|---------|---|
| S. # | <p>Innovative Program on Energy & Climate Change</p> |
| 1 | <p>Program: Renewable Energy Generation using Vertical Axis Wind Turbine</p> <p>Scope (international / regional / national / local / etc.): local</p> <p>Description: Ziauddin University Faculty of Engineering Science Technology & Management, Department of Electrical Engineering participated in the Pakistan Sustainability Week and present their project on "Renewable Energy Generation using Vertical Axis Wind Turbine". The project won the second prize in the Alternative Energy domain.</p> <p>SDG: Primarily focusing on United Nations Sustainable Development Goals SDG-7: Affordable and Clean Energy and SDG-9: Industry, Innovation, and Infrastructure.</p> <p>Photos:</p>  |
| 2 | <p>Program: Urban Forest Plantation</p> <p>Scope (international / regional / national / local / etc.): National</p> <p>SDG: Primarily focusing on United Nations Sustainable Development Goals SDG-13: Climate Action</p> <p>Description: Ziauddin University is highly focused on green implementation that is why they have developed a horticulture department who is responsible for forest vegetation, planted vegetation and green house plantation etc. They are working day and night to make the environment clean and green. ZU is planting environment friendly plants on large scale to all of their campuses with regular maintenance to make the environment clean and green for their surrounding communities.</p> <p>Photos:</p>  <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div data-bbox="236 2016 774 2042" style="text-align: center;"> <p>ZU Clifton Site</p> </div> <div data-bbox="774 2016 1423 2042" style="text-align: center;"> <p>ZU Link Road Site, Educational City</p> </div> </div> |



ZU Sukkur Campus

ZU Islamabad Campus

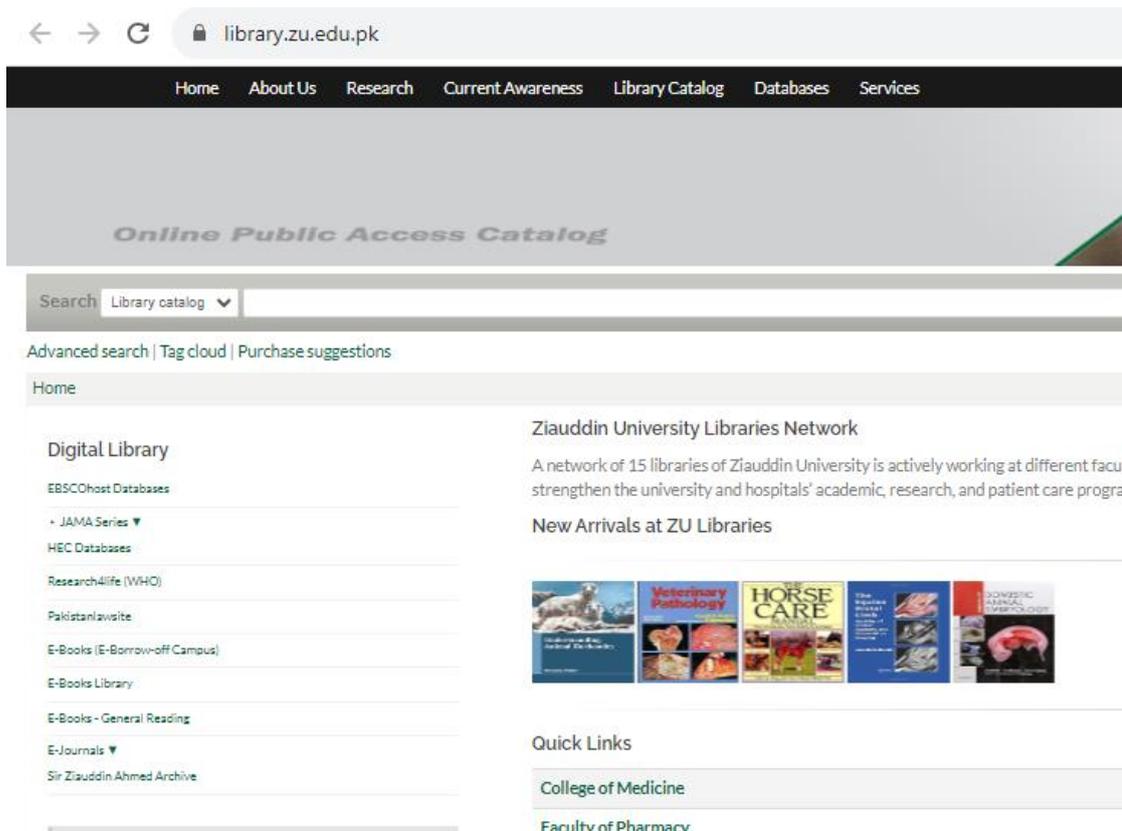
3 Program: ZU Digital Library

Scope (international / regional / national / local / etc.): National

URL: <https://library.zu.edu.pk/>

Description: The digitalization of our university's library is a truly innovative initiative with a profound impact on sustainability, energy conservation, and climate change mitigation. By transitioning to a digital library, we significantly reduce our reliance on physical resources, thereby conserving energy and reducing our carbon footprint associated with printing, transportation, and paper production. This forward-thinking approach not only enhances resource efficiency but also enables remote access to educational materials, reducing the need for travel and lowering greenhouse gas emissions. It contributes to a more sustainable future by aligning our institution with the principles of energy efficiency and environmental stewardship, making it a vital component of our commitment to addressing climate change and fostering sustainability in the academic community.

Photos:



4 Program: VR Dental Simulator are Example of Cut Down usage of Chemicals to Control Water Pollution

Scope (international / regional / national / local / etc.): local

URL: <https://www.facebook.com/watch/?v=223071949949176>

<https://pk.dental-tribune.com/news/zu-faculty-accomplishes-vr-dental-simulation-lab-training/>

Description: Ziauddin University is very much concerned about sustainability in all its operations. Virtual Simulator allows students to refine their clinical skills in a sustainable manner. It helps student to scan simulated patient’s mouth as if it was done manually then many toxic chemicals could be used to stop spreading germs. Therefore, use of technology in terms of VR Simulator helps to contributing sustainable environment and become a major source to control water pollution. To cut down usage of chemical and control water pollution ZU has launched the Virtual Reality Dental Simulation Lab, on November 25 2021. This is the first time such a lab has been made in Pakistan. VR simulation training is now a part of the ZU Dental undergraduate curriculum. This dental simulator training will help students excel in their professional skills before starting dental procedures on patients and also reduce the use of chemicals in training and preserved water and marine life.

Photos:



5 Program: Anatomy 3D Virtual Dissection Table is an Example of Cut Down usage of Chemicals to Control Water Pollution

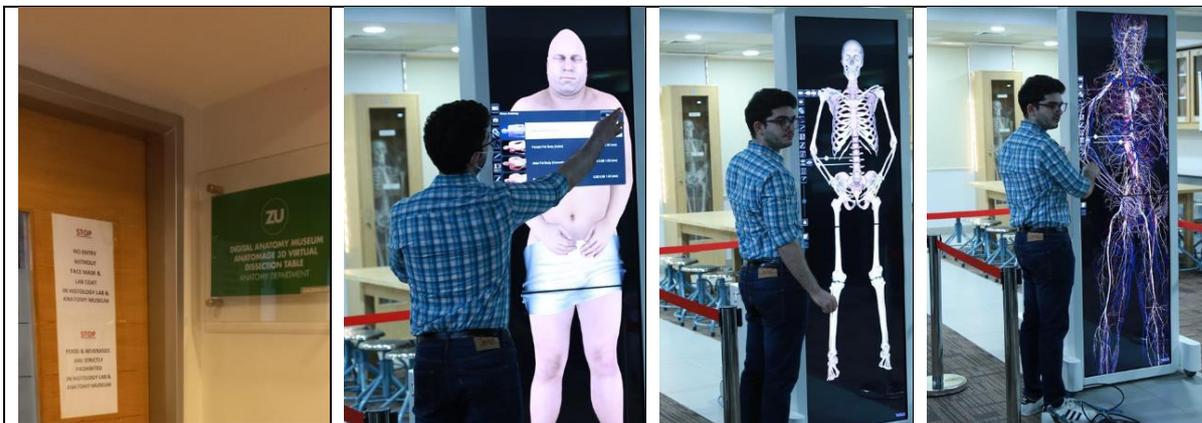
Scope (international / regional / national / local / etc.): local

URL:

<https://www.facebook.com/zuedu/posts/pfbid0xyxgXXDEXhRXM6BM2yXhaCvpfswq3Z7xa2h8kFFmwbkBMgVnKHcoRB6JYcztsXkyl>

Description: Sustainability in all its operation is the foremost goal of Ziauddin University. To preserve cadavers in the anatomy lab formaldehyde is used and its toxic vapors are not hazardous for environment only but also impact human’s life, not only this but it’s a major source to pollute climate. To keep these potential hazardous in view and to minimize the or no use of chemical in anatomy labs which cause pollution, Ziauddin University stepped up and introduced a 3D Virtual Dissection Table, Anatomage; a powerful tool that will allow students to dissect complex structures with their fingers. The Anatomage Table and Digital Anatomy Lab inaugurated by Dr. Asim Hussain, Chancellor Ziauddin University makes Ziauddin University a technology leader not only in Pakistan, but in South Asia. Anamatage, designed with the latest 3D technology, allows students to visualize every structure of the body in great anatomic detail with also reduce the use of chemicals in training and preserved land, water and marine life

Photos:



6 Program: Radio show/Webinar / Parent Training Series & Online Meetings

Scope (international / regional / national / local / etc.): International/ Regional

URL:

<https://fb.watch/mTVMyMODrV/?mibextid=RUbZ1f>

<https://fb.watch/mTWOJIZQf8/?mibextid=Nif5oz>

<https://fb.watch/mTYkba2S2G/>

Description: Introducing webinars and online meetings at our university is a forward-thinking and innovative approach with broader implications for sustainability, energy conservation, and climate change action. By offering webinars, we're reducing the need for physical meetings and conferences, which often involve extensive travel and energy consumption. This not only minimizes our carbon footprint but also encourages more sustainable practices by reducing our reliance on transportation and energy-intensive event logistics. Additionally, webinars provide a platform for discussing and disseminating knowledge on sustainability, clean energy, and climate change, fostering awareness and education within and beyond our community. As we embrace this modern learning and communication method, we're simultaneously advancing our commitment to sustainability, energy efficiency, and the fight against climate change.

Photos:



7 Program: ZEE Solar Cafe

Scope (international / regional / national / local / etc.): local

URL: <https://drive.google.com/file/d/1pkqvJiMfmpkbEYVFEXoad3K7gZDQVnCM/view?usp=sharing>

Description: Ziauddin University prefers sustainability in all their operations and activities. One of their initiatives is covering Cafeteria shades with solar panel roofs. Such technology would reflect heat from the sun and use the sun's energy to power buildings and electric appliances. We think we have a multipurpose product that can provide shade to students from burning heat of sun and also generate renewable electricity and can change the view of a grey, empty space or old-style parachute Umbrella into a nice architectural function.

Photos:



8 Program: Solar Parking

Scope (international / regional / national / local / etc.): local

URL: https://drive.google.com/file/d/1AKMgv2_MXrl_sasy2U1v31g0t3Gy9spG/view?usp=sharing

Description: Ziauddin University prefers sustainability in all their operations and activities. One of their initiatives is covering parking lots with solar panel roofs. Such technology would reflect heat from the sun and use the sun’s energy to power buildings and electric appliances. We think we have a multipurpose product that can cover our cars, generate renewable electricity and can change the view of a grey, empty space into a nice architectural function.

Photos:



9 Program: Solar Street Lights

Scope (international / regional / national / local / etc.): local

URL: <https://drive.google.com/file/d/1zIg9gDwI2hdD80gPDwey0dLEUeV82hFp/view?usp=sharing>

Description: After successful implementation of Solar Parking and Solar Café Ziauddin University started a new chain of sustainability develop with the initiative of Solar Street lights. Such technology would reflect heat from the sun and use the sun’s energy to bright the streets at night. We replaced all our old traditional street lights into new solar street lights in our Sukkur Campus and Link Road site. Which are not only attracted but also save our energy consumption. These street lights also help residents to move from surrounding without fear of darkness.

Photos:



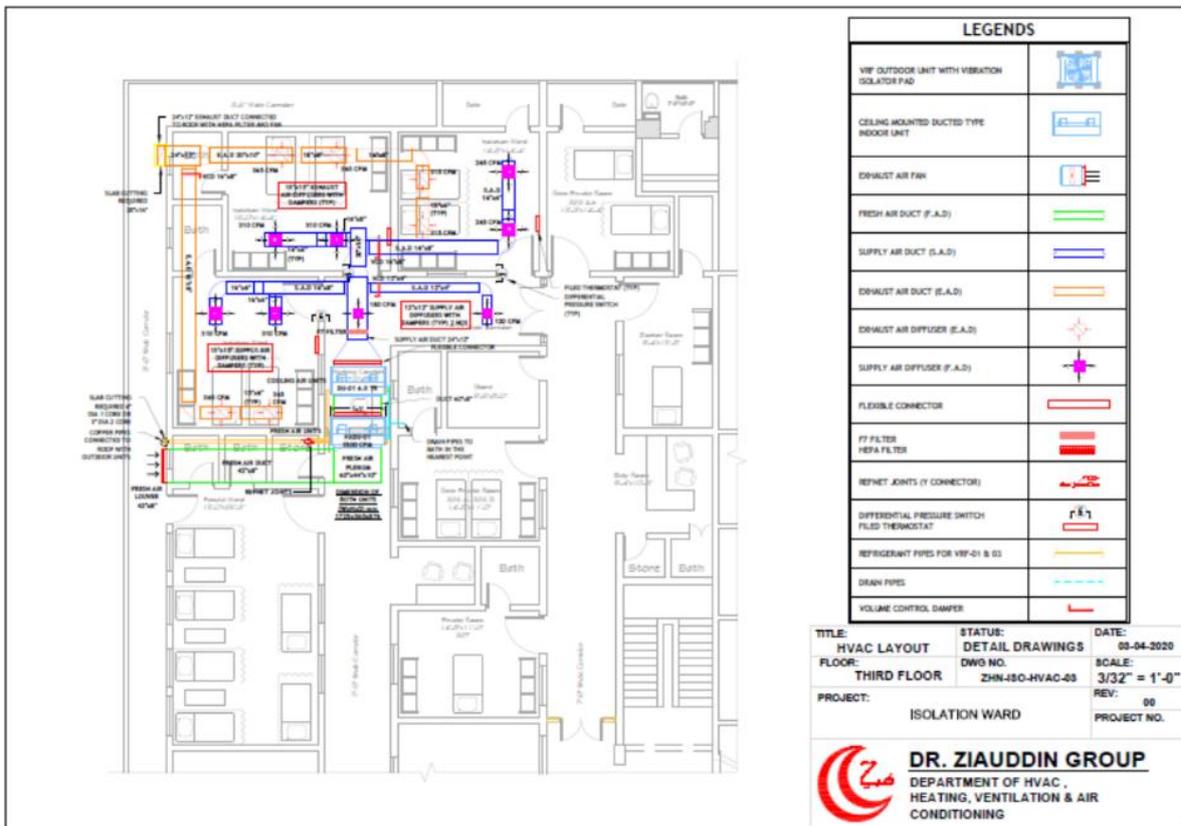
10 Program: Smart room sterilization / Airborne Infection Isolation (AII) Rooms

Scope (international / regional / national / local / etc.): Local

URL: [Airborne Infection Isolation \(AII\) Rooms.pdf](#)

Description: To maintain the sustainability and reduce the spread of air pollution Ziauddin University has designed Smart Sterilization Rooms in their hospital to avoid the spread of infectious and spreadable disease from one patient to other patients. Smart Sterilization Room used to reduce the spread of airborne infectious diseases such as TB, Covid-19, influenzas, Pneumonia etc. from the patient in the AII Room to the rest of the hospital or University. There are also innovations in room sterilization using UVC rays for biological pollutants attached to the surfaces such as benches, floors, and walls. UVC wavelengths can be remotely regulated so they can be used for multi-organic sterilization of pollutants (biological pollutants).

Photos:



11 Program: Multi-Parameter Environmental Monitoring Device

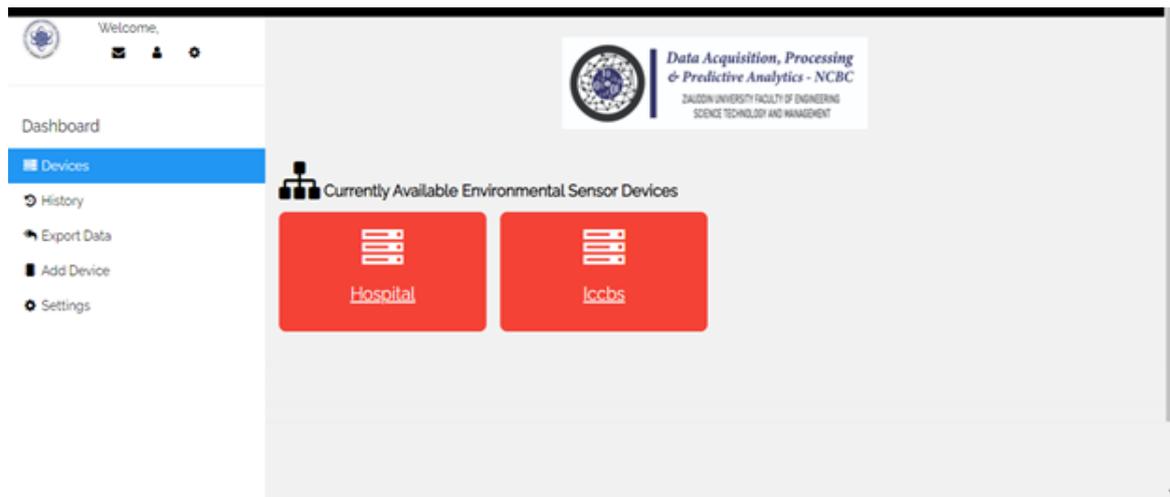
Scope (international / regional / national / local / etc.): local

URL: <https://www.facebook.com/ZUNCBC/>

Description: Environmental monitoring is a critical issue of the world these days. Pakistan; the 5th highest a populated country faces challenges due to the polluted environment. With ever-increasing traffic and industrial requirements, pollution is growing at a fast pace in almost all of the big cities in Pakistan. Karachi, being the metropolitan city and the country & industrial hub is facing environmental pollution more vehemently. To overcome this issue many indoor and outdoor environmental devices are available in the market with limited sensors.

Our system is a fusion of the internet of things (IoT), Wireless Sensor Node (WSN), and Big Data & cloud computing. The system comprises hardware and software, whereas the hardware module includes multiple sensors like Temperature, Humidity, Particle Sensor (2.5 and 10mm), carbon-di-oxide, oxygen and voice sensor for environmental monitoring. Furthermore, to identify the exact location of polluted areas, a GSM module is integrated in the system. In addition, the system is able to calculate and monitor the Air Quality Index. The whole system is integrated with a data center to store the live data; however, a web-based application is also developed to monitor sensor reading.

Photos:



Examples of innovative programs in energy & climate change at Ziauddin University

Impactful university program(s) on climate change

Ziauddin University is highly focused on green implementation that is why they have developed a horticulture department who is responsible for forest vegetation, planted vegetation and green house plantation etc. They are working day and night to make the environment clean and green.

Ziauddin University's innovative program(s) on climate change is **Forest Plantation** to all of their campuses nationwide. ZU has 2 campuses and 4 sites in three big cities of Pakistan (Karachi, Sukkur & Islamabad) and in two provinces (Sindh and Punjab), their geographical region belongs to the agricultural sector. All of the sites and campuses of Ziauddin University are striving hard to make the climate clean at **national level**.

They also make collaboration of ZU with Sindh Forest Department (SFD) which is under the Green Pakistan Programme for Urban Forest Tree Plantation. In this Collaboration SFD will provide environment friendly plants, labor and technical assistance, guidelines and protection of provided plants to the land of Ziauddin University Link Road Site, Educational City Ziauddin University is providing their land for the plantation on a large scale. ZU will provide water and proper maintenance to Urban Forestry Plantation for the surrounding community.

Total forest vegetation area at Ziauddin University is **172022.20 m²**.



Urban Forest plantation at Ziauddin University Sukkur Campus, Sukkur City, Sindh



Urban Forest Area marking for plantation at Ziauddin University Clifton-Karachi City, Sindh.



Urban Forest plantation in Collaboration with Sindh Forest Department at Ziauddin University Linkroad, Education City, Sindh



Urban Forest Plantation at Ziauddin University Islamabad Campus, Islamabad City, Punjab

Example of University program on Climate Change: Ziauddin University collaboration with Sindh Forest Department (SFD) for Urban Forest Tree Plantation

3. Waste (WS)

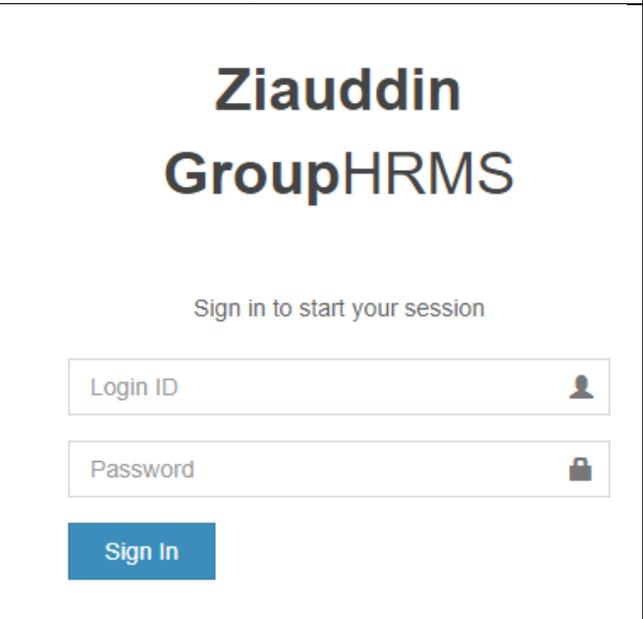
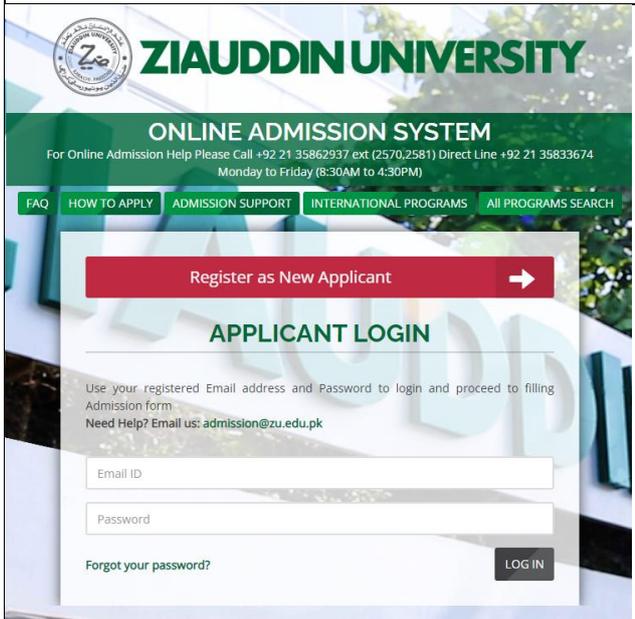
3R (Reduce, Reuse and Recycle) Program for University Waste

Ziauddin University has a sound policy for waste handling, different **color-coded dustbins** have been placed at various places in university and every floor. The red bins for plastic waste, Green Bins for waste papers, blue bins for organic waste and yellow bins for toxic waste. The waste collected into bins and then used for different purposes like plastic & paper disposable glass are used for plantation purposes. Paper waste is used for making cards and organic waste brought from animal waste, food waste and green waste are used for **fertilization for plants**, etc.

Ziauddin University is keenly focused on 3R programs and practice various activities to reduce and reuse the paper, plastic and all other waste from the campus. >75% of 3R (Reduce, Reuse and Recycle) programs are practices at Ziauddin University.



Example of Practicing on Waste Management Policy (color coded dustbins) to separate collection of waste for 3R purpose at Ziauddin University





Introductory Session on Preparation of SAR

Inbox x



QEC Ziauddin University <qec@zu.edu.pk>

Mon, Sep 19, 2022, 9:51AM



to Fariha, Bushra, Tahmeena, Zafar, ALI, Latif, Ata, NAYEL, SIDRA, AMBREEN, Maqsood, ZEB, ARIF, TASA' ▾

Dear Program Team,

QEC is initiating the process of the Self Assessment Report for the year 2022-2023. You all are nominated as Program Team to prepare SAR of your respective programs. To facilitate you all in the process of preparing SAR, QEC is going to conduct an Introductory session on Preparation of SAR on 20th September, 2022 at 11:00 a.m. This will be an **online** session.

Kindly confirm your availability.



ZIAUDDIN UNIVERSITY



*"Please consider your environmental responsibility before **printing** this e-mail or its attachment(s)"*



ZIAUDDIN UNIVERSITY FM 98.2 PRESENTS
NAYA DIN NAYI BAAT
TOPIC:
 Awareness of speech And language disorder
Guest Speakers
 Ms Fatima Yousuf
 Ms Rabika Amanullah
 (Working as a speech and language therapist)
ZUFM 98.2
FOR TEXT & LIVE CALL
 03 21-3660303
 021-35305787
WEDNESDAY
 10th AUG
 2022
 12 TO 1 PM
 ONLY ON
 ZU FM 98.2



PARENT TRAINING SERIES
HOW TO INTERACT WITH YOUR CHILD
 (INSIGHT OF A SPEECH LANGUAGE THERAPIST)
22ND NOVEMBER, 2022 | 11AM-12PM
 LIVE ON FACEBOOK AT ZCSLHS PAGE
SPEAKERS:
 Hoor Fatima
 Inaara Rahim Samani
 A PRODUCT OF COLLEGE OF SPEECH LANGUAGE & HEARING SCIENCES DEPARTMENT



ZiauddinUniversity
 Sign in to start your session
 Password
 Remember Me
[I forgot my password](#)
 Sign In

E-Portals/ Webinars/ Online Sessions/ Online Meetings/ Online Trainings/ Online Admission & Marketing Activities/ Radio shows/ Restriction for Printing all these are the example of Paper reduction practice at Ziauddin University

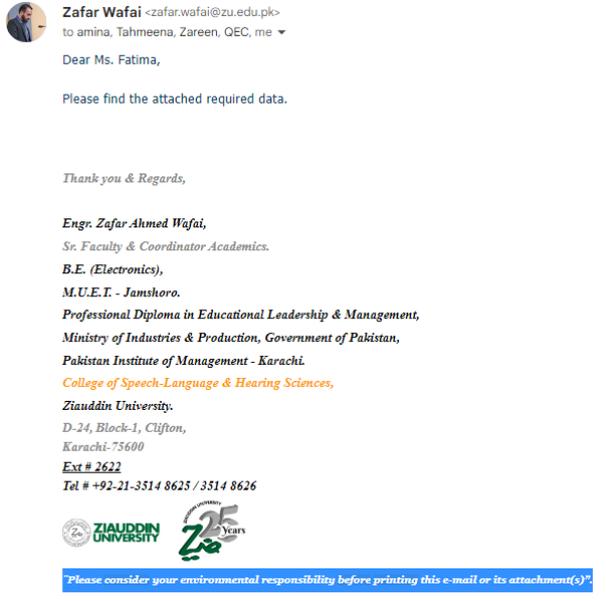
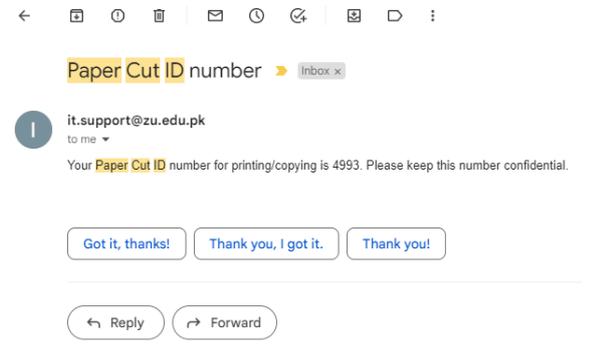
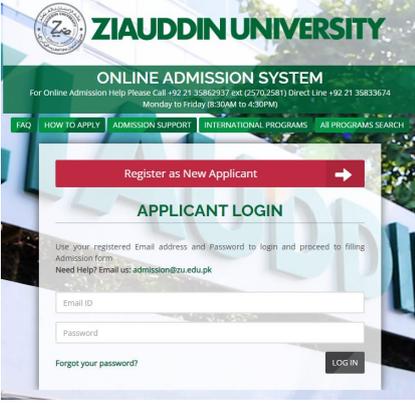


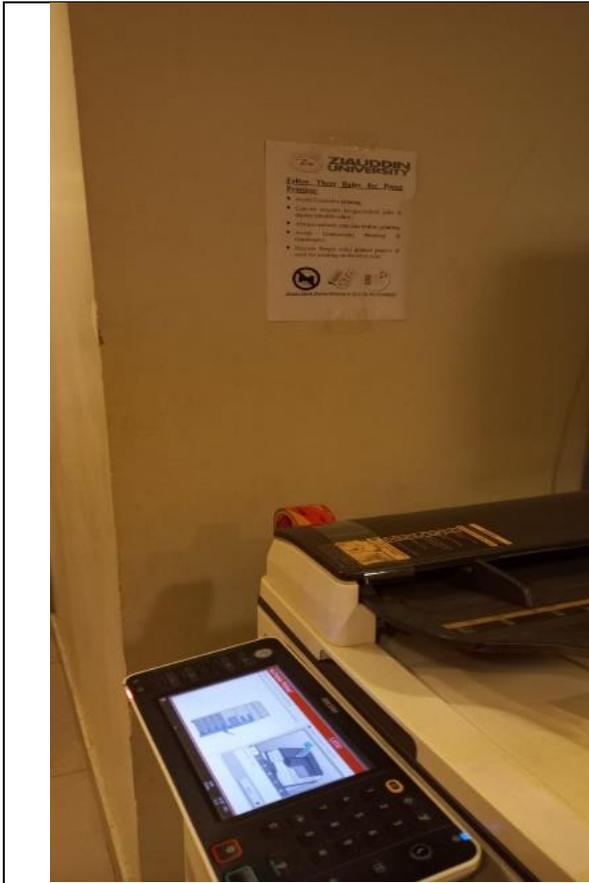
Restriction on use of plastic bottles/ free water distribution to refill own bottles/ drip irrigation all these are the example of plastic reduce/ reuse & water reuse/ recycle practice at Ziauddin University

Example of 3R Programs for Ziauddin University Waste



Program to Reduce the Use of Paper and Plastic on Campus

| | | |
|--|---|--|
|  <p>Zafar Wafai <zafar.wafai@zu.edu.pk> to amina, Tahmeena, Zareen, QEC, me ▾</p> <p>Dear Ms. Fatima,</p> <p>Please find the attached required data.</p> <p>Thank you & Regards,</p> <p>Engr. Zafar Ahmed Wafai, Sr. Faculty & Coordinator Academics. B.E. (Electronics), M.U.E.T. - Jamshoro. Professional Diploma in Educational Leadership & Management, Ministry of Industries & Production, Government of Pakistan, Pakistan Institute of Management - Karachi. College of Speech-Language & Hearing Sciences, Ziauddin University. D-24, Block-1, Clifton, Karachi-75600 Ext # 2622 Tel # +92-21-3514 8625 / 3514 8626</p>  <p><i>"Please consider your environmental responsibility before printing this e-mail or its attachment(s)"</i></p> |  <p>Ziauddin University ✓</p> <p>79K likes · 86K followers</p> <p>Official page of Ziauddin University and its Faculties/ Colleges.</p> <p>WhatsApp Message</p> <p>Liked ...</p> <p>Posts About Videos More ▾</p> | |
| <p>Use of Softcopies instead of Hardcopies to reduce the paper for documentation & record</p> | <p>Old Thumb marketing activities Switched to Social Media Marketing</p> | |
|  <p>← 📎 🕒 🗑️ 📧 🕒 🔄 📧 📄 ⋮</p> <p>Paper Cut ID number ▸ Inbox x</p> <p>it.support@zu.edu.pk to me ▾</p> <p>Your Paper Cut ID number for printing/copying is 4993. Please keep this number confidential.</p> <p>Got it, thanks! Thank you, I got it. Thank you!</p> <p>← Reply → Forward</p> | <p>Introductory Session on Preparation of SAR Inbox x ⌵ 🖨️ 📄</p> <p>QEC Ziauddin University <qec@zu.edu.pk> Mon, Sep 19, 2022, 9:51AM ★ ↶ ⋮ to Fariha, Bushra, Tahmeena, Zafar, ALI, Latif, Ata, NAVEL, SIDRA, AMBREEN, Maqsood, ZEB, ARIF, TASAI ▾</p> <p>Dear Program Team,</p> <p>QEC is initiating the process of the Self Assessment Report for the year 2022-2023. You all are nominated as Program Team to prepare SAR of your respective programs. To facilitate you all in the process of preparing SAR, QEC is going to conduct an Introductory session on Preparation of SAR on 20th September, 2022 at 11:00 a.m. This will be an online session.</p> <p>Kindly confirm your availability.</p> | |
| <p>Limited Printing Access to restrict excessive printing of papers</p> | <p>Online Session to reduce the use of paper for documentation</p> | |
|  <p>ZIAUDDIN UNIVERSITY</p> <p>ONLINE ADMISSION SYSTEM</p> <p>For Online Admission Help Please Call +92 21 35862937 ext (2570,2581) Direct Line +92 21 35833674 Monday to Friday (8:30AM to 4:30PM)</p> <p>FAQ HOW TO APPLY ADMISSION SUPPORT INTERNATIONAL PROGRAMS ALL PROGRAMS SEARCH</p> <p>Register as New Applicant →</p> <p>APPLICANT LOGIN</p> <p>Use your registered Email address and Password to login and proceed to filling Admission form. Need Help? Email us: admission@zu.edu.pk</p> <p>Email ID Password</p> <p>Forgot your password? LOG IN</p> | <p>Ziauddin GroupHRMS</p> <p>Sign in to start your session</p> <p>Login ID</p> <p>Password</p> <p>Sign In</p> | <p>Ziauddin University</p> <p>Sign in to start your session</p> <p><input type="text"/></p> <p>Password <input type="password"/></p> <p><input type="checkbox"/> Remember Me Sign In</p> <p>I forgot my password</p> |
| <p>Admission Portal to reduce the use of paper in admission process</p> | <p>HRMS Portal to reduce the use of paper in Employee Activities</p> | <p>University Portal to reduce the use of paper in academic activities</p> |



Central Printing Machine to Limit the printing & Paper waste



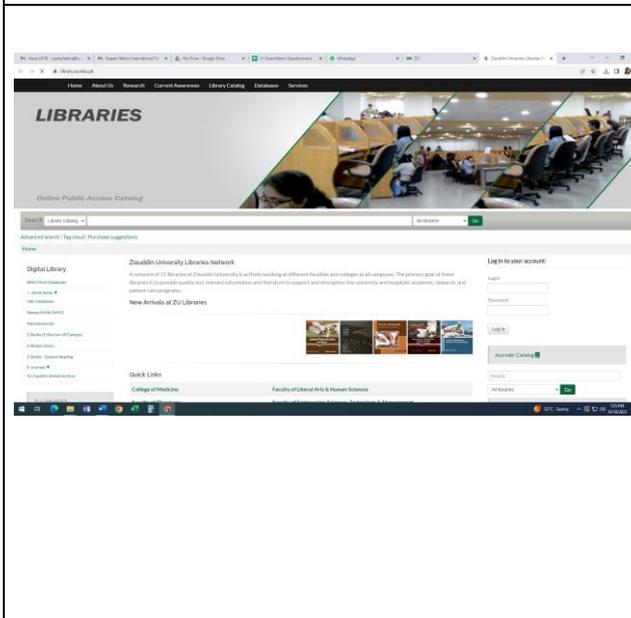
Follow These Rules for Paper Printing:

- Avoid Excessive printing.
- Convert simplex (single-sided) jobs to duplex (double-sided).
- Always recheck your data before printing.
- Avoid Unnecessary Printing & Hardcopies
- Recycle Single sided printed papers & used for printing on the other side.



Always Think Before Printing & Save The Environment

Rules to reduce, Reuse & Recycle Paper Printing



ZU Digital Library to reduce the use of paper in material resources & paper production



Free Water Distribution to reduce the use of plastic bottles inside the campus



Restriction on Use of Plastic Bottles inside the campus



ZIAUDDIN UNIVERSITY

ZU/Ref No. 3091

August 27, 2019

NOTIFICATION

It is for information to all concern that the Ziauddin University is striving to achieve SDG goals. The purpose of this effort is to recognize as the icon of innovative, leading edge educational institute who endeavors to International sustainability efforts for Environment, Economy, and Equity.

To support this effort, it is requested to all concern to make efforts in reducing the consumption of papers and plastics within the Ziauddin University.


Prof. Dr. Muhammad Asif,
 Director, Quality Enhancement Cell,
 Ziauddin University

PROF DR. MUHAMMAD ASIF
 Director, Quality Enhancement Cell
 Ziauddin University

Notification to Restrict on Printing of Papers & Use of Plastic

Example of Program to Reduce the Use of Paper and Plastic in Campus (Ziauddin University)



Ziauddin University have proper practices and taking many steps to minimize the use of paper and plastic. which are as follows:

1. **Promote the use of Softcopies instead of Hardcopies:**

Ziauddin University performs every operation online via google meet, google Docs, Spreadsheets and E-Portal to avoid excessive use of papers. Each employee is practicing on softcopies rather than relying on hardcopies. Even Emails are also sent with the message "**Please consider your environmental responsibility before printing this e-mail or its attachment(s)**".

2. **Use of E-Portals & Online Activities:**

ZU also designed their value chain with the aim **less or zero use of paper** therefore, all the day to day activities are switched online for e.g.: Manual marketing replaced with social media marketing such as banners, streamers, pamphlets, brochures, annual reports, newsletters, notifications/ memos etc. are now disseminated online through emails, website and social media sites.

Admission processes have also switched to online admissions through a portal, candidate application forms, entry tests, fee collection, admission announcement, document records; all these activities were contained with excessive use of paper. Now Ziauddin university has aligned all these activities through an online **admission portal**.

Employee day to day activities of hiring, resignation, attendance, salary slips, complaints and all other human resources activities are conducted online **HRMS portal** to reduce use of paper in the campus.

All academic activities, classroom lectures, courses offer, transcripts, course curriculums, quizzes, assignments, MCQS, past papers, evaluations, feedbacks, student guides, prospectus and all other related academic documents for faculty and students are conducted and disseminated through online via **Uni Portal**.

3. **Radio show/Webinar / Parent Training Series & Online Meetings**

Introducing webinars and online meetings at Ziauddin university is a forward-thinking and innovative approach with broader implications for sustainability, energy conservation, and climate change action. By offering webinars, radio shows, online session, training series and online meetings we're reducing the need for physical meetings which are also reducing the use of papers printing for all the participants, as we embrace this modern learning and communication method, we're simultaneously advancing our commitment to sustainability, energy efficiency, and the fight against climate change.

4. **Restrict Printing Access**

To restrict print jobs in the daily workplace Ziauddin University limited the printing access to specified people. Each person has their own printing ID to access to the printer without a paper cut ID no people can print. In this way printing of paper has been reduced because no one has the right to print anything anytime.

5. **Central Printing Machine**

6. **Instead of giving printer facilities to each department or each employee, Ziauddin University has placed Central Printers at every floor with mentioned printing rules. In this way people are used to limited printing in their day-to-day activity.**

7. **Rules to Reduce Reuse & Recycle Printing Papers**

To reduce the use of Printing Ziauddin University has placed proper rules of printing with each central Printing Machine. Which are as follows:

- Avoid Excessive printing
- Convert simplex (single-sided) jobs to duplex (double-sided)



- Always recheck your data before printing
- Use an online system instead of hard copy.
- Single sided printed papers are collected together and further used for printing on the other side.

8. Digital Library

The digitalization of our university's library is a truly innovative initiative with a profound impact on sustainability, energy conservation, and climate change mitigation. By transitioning to a digital library, we significantly reduce our reliance on physical resources, thereby conserving energy and reducing our carbon footprint associated with printing, transportation, and paper production. This forward-thinking approach not only enhances resource efficiency but also enables remote access to educational materials, reducing the need for travel and lowering greenhouse gas emissions. It contributes to a more sustainable future by aligning our institution with the principles of energy efficiency and environmental stewardship, making it a vital component of our commitment to addressing climate change and fostering sustainability in the academic community.

9. Campaign of REFUSE PLASTIC

- Ziauddin University has ran the campaign of REFUSE PLASTIC and restricted the use & buying and selling of plastic bottles and plastic bags inside the campus.
- No one is allowed to enter with disposable bottles, only Own bottles are allowed to take with them and refill from water filters whenever required.
- Security Guards get the plastic bottles from the visitors at the entrance and collected bottles are further used for plantation purposes.

10. Free Water Distribution

Ziauddin University has placed water filters in the university for free distribution of drinking water for the students, staff, faculty and general public (visitors/ guests). The purpose of this free distribution of drinking filter water is to reduce the use of plastic bottles from the university and promote the culture to bring your own bottles and refill whenever needed. In this way not only the plastic bottles have reduced but waste of water has also been minimal.

Organic Waste

In Ziauddin University, the organic waste is up to 5% reduced by increasing the little bit prices on meal due to inflation and rising in prices in Pakistan. This automatically reduces the food waste as many people buy food as per their need and try to avoid leaving it on the plate. About 6% food waste was reused last year by giving leftover meals to the people with less income and kitchen waste such as vegetables and fruits peels fed to farm animals. The rest of the organic waste is treated by putting it all together in the pit holes for processing compost for plantation. Which is about 89%. Similarly, leaves that are fallen on ground due to rain or storm, reused by riding the tractor on land therefore, rain water and leaf waste directly compost the land. In this way Ziauddin University is trying hard to reduce, reuse and recycle the waste as much as they can, to build a healthy environment.

| Type Of Waste | Amount (Ton) | | | |
|---------------------|--------------|---------|--------|----------|
| | Total | Reduced | Reused | Recycled |
| Organic | 12.159 | 0.608 | 0.687 | 10.864 |
| - Food Waste | 1.584 | 0.608 | 0.237 | 0.739 |
| - Green Waste | 1.45 | 0 | 0.45 | 1 |
| - Animal Waste | 9.125 | 0 | 0 | 9.125 |
| 3R of Organic Waste | 100% | 5% | 5.7% | 89.3% |

Organic Waste Treatment

In Ziauddin University, the sources that produce organic waste are canteens, Cafes, fallen leaves, cutting of Plants and Animal waste etc. Canteen and Cafes waste are dumped into blue bins that are placed for organic waste. Full Blue Bins waste is then handed over to the Horticulture department for recycling. Animal farms also hand over animals’ manure to the horticulture department. Leaves that have fallen on ground due to rain or storm, reused by riding the tractor on land therefore, rain water and leaf waste directly compost the land. The remaining green waste such as cutting of plants during gardening and fallen leaves during cleaning become the source of organic fertilizer. Pits are made at Ziauddin University Link Road Site for organic waste recycling purposes. The Horticulture department twice a week collects green waste from gardeners, kitchen waste from blue bins and animal manure from animal farms. All the organic waste from all the three sources then dumps into pits for making compost. As a result, organic fertilizers are produced that are used in the Orchard Area and field for plantations and fruits and vegetables farming. Therefore, the treated volume of organic waste is extensive >75%.

| | | |
|---|--|---|
|  |  |  |
| <p>Using Tractor to reuse rainwater and leaf waste to directly compost on land</p> | <p>Collection of green waste for decomposition</p> | <p>Collection of animal manure for decomposition</p> |
|  |  |  |
| <p>All Organic waste (Green waste, food waste and animal manure) are used for Waste decompose</p> | <p>Fertilization Process</p> | <p>Use Compost for Urban Forest Plantation at Ziauddin University</p> |
| <p>Example of Organic Waste Recycle at Ziauddin University</p> | | |

Inorganic Waste

According to color-coded dustbins policy Ziauddin university collects inorganic waste in two bins. The red bins for plastic and glass waste, Green Bins for waste papers and card boxes. ZU had implemented **No paper & Plastic policy** all over the campus for the purpose of reduction of inorganic waste. To reduce paper following rules are practicing in our university, that are as following:

- Promote the use of softcopies
- Old Thumb marketing activities Switched to Social Media Marketing
- Limited Printing Access to restrict excessive printing of papers
- Online Session to reduce the use of paper for documentation
- Use of E-Portals for all the activities
- Workshops, Seminars switched to Radio show/Webinars / Parent Training Series & Online Meetings
- Practicing Printing SOPs
- Personal printers switch to centralized printer with limited paper cut IDs
- Digital Library

All the above practices helped to achieve the aim of a **paperless environment** at our university. Similarly, Ziauddin University is also trying hard to reduce plastic therefore, following practices help to run the campaign of **Refuse Plastic**. Which are as following:

- Restriction on selling of water bottles and plastic shoppers inside the campus
- Restriction on bringing disposable bottles
- Own bottles are allowed that can refill from dispensers
- Free filtered water dispensers placed for drinking

All these above collective efforts result in reducing almost 50% of inorganic waste from the campus. ZU also promotes the reuse and recycling of waste instead of open dumping and saves the climate from pollution. Therefore, papers are reused by double-sided printing method, plastic bottles are reused by refill again and again, hard plastics and disposable tea glass are used by the horticulture department in different projects such as inside planting decoration, nursery raising and seeds plantation etc. In this way more than 20% waste is reused. Ziauddin University has created the contract with private vendors as well for recycling the inorganic waste. All the inorganic waste unused or after reused is distributed into four categories that is paper waste, soft plastic, hard plastic and cards etc. these handed over to private contractors for recycling. In this way more than 75% of inorganic waste is reused and recycled and saves the planet from the environmental pollution.

| Type Of Waste | Amount (Ton) | | | | |
|----------------------------|--------------|-------------|-------------|-------------|-----------|
| | Total | Reduced | Reused | Down-Cycled | Up-Cycled |
| Inorganic Non-Toxic | 12.54 | 6.27 | 2.93 | 9.66 | 0 |
| - Paper | 2.4 | 1.2 | 1 | 2.4 | |
| - Soft Plastic | 0.84 | 0.42 | 0 | 0.84 | |
| - Hard Plastic | 2.1 | 1.05 | 0.8 | 1.42 | |
| - Card box and others | 7.2 | 3.6 | 1.13 | 5 | |

Inorganic Waste Treatment

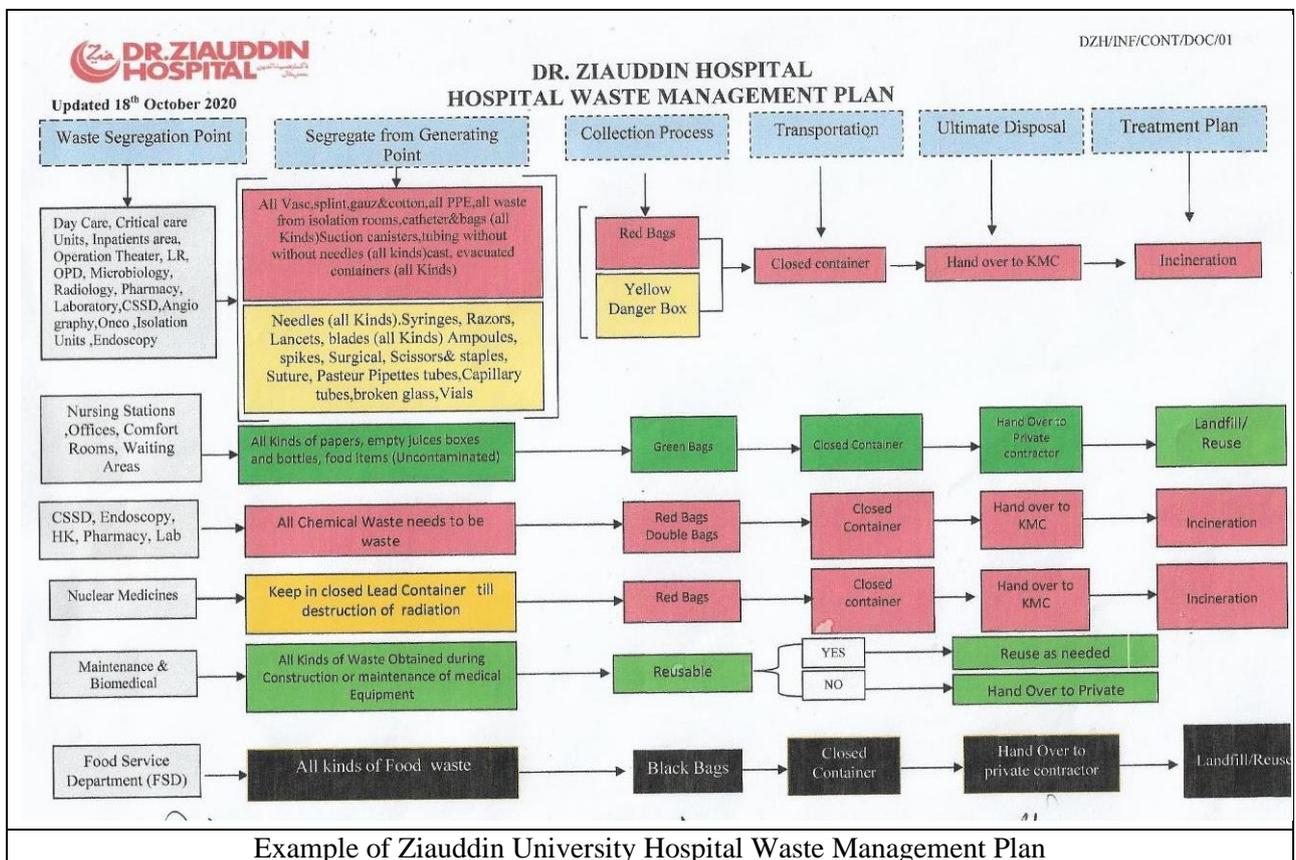
Ziauddin University is practicing on the following policies regarding waste and disposal to develop the hygienic and sustainable environment for everyone. These Policies are as follows:

- Waste Management Policy
- Cleaning of Walls & Floors
- Management of Spill
- Cleaning, Disinfectant and Sterilization Policy
- Safe handling of Contaminated Sharps
- Waste Disposable and making Composed

To meet the standards of proper hygiene and health safety, Ziauddin University Hospital centralizes the waste management system with the public waste management body. Ziauddin University Hospital is following the comprehensive guidelines and policies for the proper recycling process.

Different color-coded dustbins allow students and faculty to easily determine waste categories and dump liters accordingly. ZU enters into a contract with a private contractor for collection of the inorganic waste and the organization implements a process to recycle such waste. Our Horticulture department took a little initiative to recycle inorganic waste by recycling the tea disposable cups for nursery raising and seed plantation.

Ziauddin University not only safely disposes and recycles waste but also practices cleaning of walls, floor, disinfestation and sterilization of beds, rooms and equipment according to the specified policies for making their surrounding Clean and Hygienic for their staff, students, patients, attendants and residents etc. ZU Management is also analyzing these policies every year and revised as per the requirements.





Color coded dustbins for waste collection in separate categories



Example of Tea disposable cups reuse for nursery raising and seed plantation

DZH/INF/CONT/06
Issue date 20th July 2007
Revision date 22nd Jan 2022

DR. ZIAUDDIN HOSPITAL
INFECTION CONTROL DEPARTMENT

Title: Hospital Waste Management
Initiated: Ms. Farkhanda Haroon (Asst manager)
Ms. Hina Murad (Infection Control Officer)
Approved: Dr. Faisal Iqbal Afridi (Associate Prof Microbiology & Head of ICD)
(Head of I/C Committee)
Date of Reviewed: 22nd January 2022
Applicable: To all campuses

1. Definition:
Healthcare Waste is defined as solid or liquid waste arising from healthcare or health related facilities. This waste comprises two fractions, namely risk waste and non-risk waste as illustrated below

2. Healthcare Clinical Waste:
Healthcare Clinical Waste is majority is consist on infectious waste (also called medical, biomedical or biohazard waste) is defined as materials generated as a result of the diagnosis or treatment of a patient and that is capable of producing an infectious disease.

3. PURPOSE:

- To establish guidelines on the proper disposal of waste
- To implement a program (for medical waste segregation collection and storage) that is consistent with laws and regulation for safe disposal of medical waste. Eg. Ministry of health (MOH) waste management guidelines.
- To reduce health and safety risks to staff, patients and visitors.
- To reduce waste disposal costs.
- To ensure that you and your employer comply with legislation, "Duty of care" to ensure waste is handled and disposed off safely and correctly.
- To provide a safe environment.
- To reduce hospital cost.

4. SCOPE:
This procedure is applicable to Infection Control Department services of all Campuses of Dr. Ziauddin Hospital (DZH).

5. Policy Statement:
To properly define the collecting, handling, transporting, and disposing of hazardous waste to ensure the safety of the Health Care Workers, Sanitary Workers, and the general public in addition to cost reduction. Develop and support the treatment of waste in order to prevent environmental contamination and maintain public health.

| | | |
|--|--|--|
|  DR. ZIAUDDIN HOSPITAL <small>ESTD 1957</small> | POLICY NO: DZH/CLIF/IPC/POLICY/03 REVISION NO: Original | APPROVAL DATE: November 2019 |
| DEPARTMENT: Infection Prevention and Control Department | | |
| TITLE: Guideline for Cleaning, Disinfection and Sterilization. | | |

1. PURPOSE:

- 1.1. To provide guideline for cleaning, disinfection and sterilization of items used in patient care areas.

2. APPLICABLE TO:

- 2.1. All healthcare provider working in patient care area of Dr. Ziauddin Hospital Clifton.
- 2.2. This policy applies to those reusable items, equipment's and medical device which require cleaning, disinfection and sterilization.

3. AIM:
The aim of the policy is to ensure:

- 3.1. There are clear lines of accountability for cleanliness for patient care items, equipment, medical devices and the environment.
- 3.2. All staff is correctly trained in cleaning techniques method.
- 3.3. All staff involved with cleanliness of patient care equipment, medical devices and the environment is clear on their individual roles and responsibilities.
- 3.4. Only clean equipment is stored in clean equipment area.
- 3.5. Equipment will not be stored on or immediately around the sink to avoid contamination.
- 3.6. All other equipment that is not clean or cannot be cleaned immediately after use shall be labeled to indicate that it is ready for reprocessing and placed in the dirty equipment area.
- 3.7. Only soiled equipment should be covered and stored in the soiled or dirty area and shall be labeled to indicate that it is ready for reprocessing.

Ziauddin University Hospital Waste Management Policy

Ziauddin University SOPs for Cleaning, Disinfection & Sterilization

Example of Cleaning & Disposal of waste practices at ZU Hospital & University to make Environment Clean, Green & Sustainable

Toxic Waste

Ziauddin University keenly focused on clean green environment that is why Bio- hazardous/ toxic waste are safely handled with a lot of precautions to prevent infection in the campus. ZU has a proper disposal waste plan for handling toxic waste and are strictly practicing. According to those following rules are practicing which are as follows:

- All the toxic waste would be dumped into the **yellow bins**. All yellow bins waste are then further separated into two categories separated by **color coded bags**.
 - **Red bags** are used for infectious and sharp waste that needs to be incinerated.
Red lit danger boxes: are used for sharp management.
 - **Yellow bags:** are used for (tissues, organs, Placenta body parts, fetuses, blood and body fluids)
- Hazardous waste packed properly to prevent the campus population from potential exposure to infectious/ hazardous materials and to facilitate the proper handling, storage, treatment and/or disposal.
- Housekeeping staff collect these bags from designated areas and transport them to the waste storage room by adopting all standard safety precautions. Which are as follows:
 - Do not put hands inside the bags / containers.
 - If bags tear or get contaminated, they are replaced in new clean bags.
 - Never allow any person to put their hand inside the bags.
 - Hazardous / Infectious waste bags must be fully- closed & sealed and handled by neck only while transportation
 - Waste bags must not be filled with more than 3/4 of their capacity and must not be pressurized or compacted.
 - Waste bags must not be held too close to the collector’s body or to be held from their bottom.
 - Biohazard waste must not be mixed with non-biohazard waste.
 - Personal Protective Equipment must be readily available and worn accordingly while handling waste.
 - Wash hands thoroughly after contact with biohazard waste.
- This hazardous waste is then safely handled to our private contractor Karachi Metropolitan Corporation for the purpose of proper disposal of hazardous waste through incineration plants of KMC.
- KMC authorized staff collect this toxic waste from the storage room under supervision of the housekeeping supervisor.
- Practicing all the safety measures in the university, toxic waste was completely disposed-off through incineration process by KMC Staff.

| Type Of Waste | Amount (Ton) | | | | |
|------------------|--------------|---------|--------|-------------|-----------|
| | Total | Reduced | Reused | Down-Cycled | Up-Cycled |
| Toxic | 10.56 | 2.768 | 0 | 0 | 0 |
| - Clinical Waste | 7.92 | 1.188 | 0 | 0 | 0 |
| - Lab. Chemicals | 2.64 | 1.58 | 0 | 0 | 0 |
| - Etc. | | | | | |

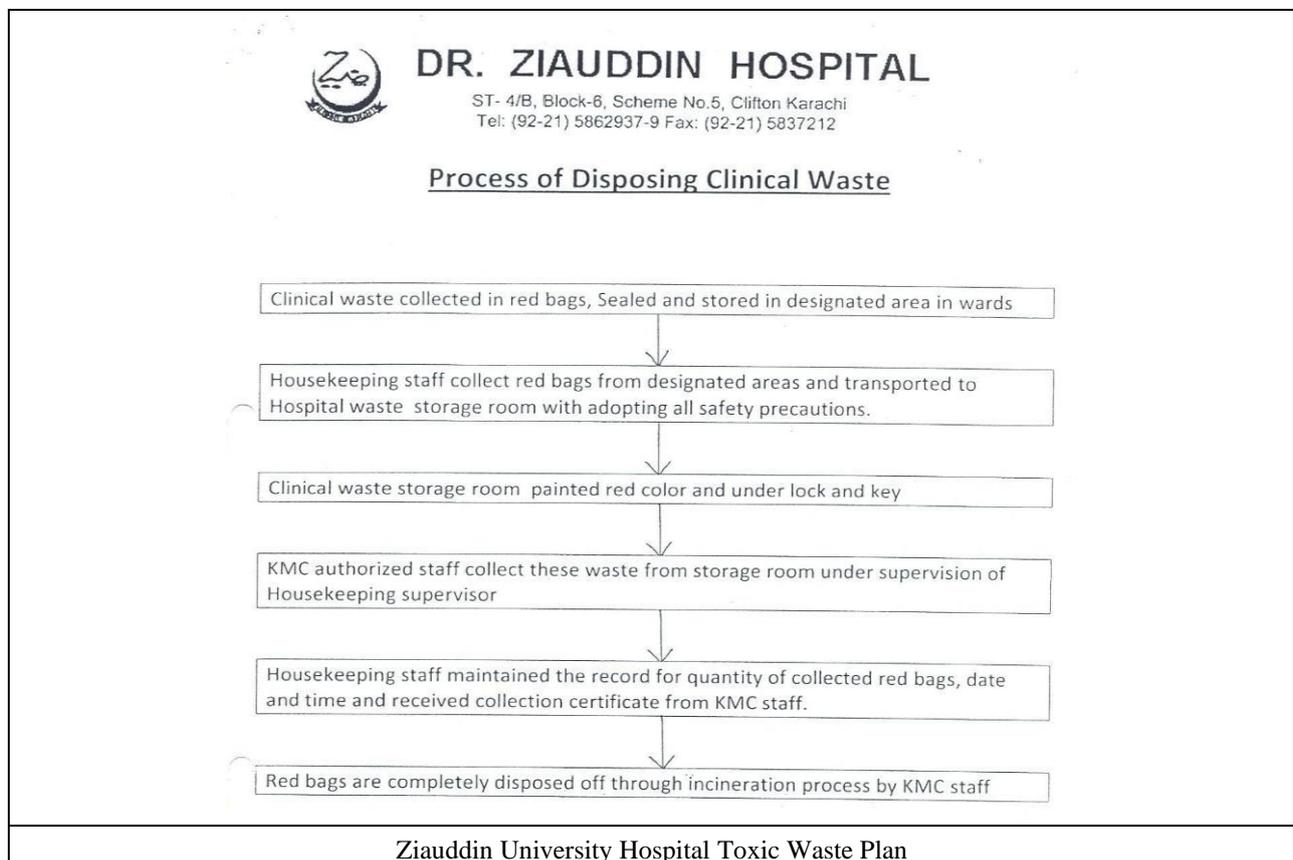


Ziauddin University has two types of toxic waste. Clinical waste that is generated from clinics by house job students in performing his duties on Ziauddin hospitals and clinics. Such as tissues, organs, Placenta body parts, fetuses, blood and body fluids, sharp needles, bandages and dressing with blood, any container, bag or tubing containing blood, glass and blades etc. The second type of toxic waste is lab chemicals that are generated by medical college students for their course study, learning and practice purpose in labs. These are waste that contains solid liquid or gaseous chemicals resulting from diagnostic, therapeutic, laboratory activities or those used in cleaning and disinfecting or sterilizing procedures.

Ziauddin University aims to reduce toxic waste by upgrading their education system by replacing old medical teaching techniques with modern technology such as VR Dental Simulator and Anatomy 3D Virtual Dissection Table. Virtual Simulator allows students to refine their clinical and professional skills in a sustainable manner. It helps students to scan a simulated patient's mouth without use of any tool or toxic chemical. Similarly, Cadavers used by medical students to study anatomy, identify disease sites, determine causes of death, and provide tissue to repair a defect in a living human being. As if it was done manually then many toxic chemicals have to be used to stop spreading germs. a 3D Virtual Dissection Table, Anatomage; a powerful tool that allows students to dissect complex structures with their fingers. Therefore, the use of technology such as VR Simulator and VR Dissection Table helps to contribute to a sustainable environment and become a major source to cut down usage of clinical tools and chemicals for training and preserving which are the source of reduction of toxic waste. These VR dissections are now a part of the curriculum of medical and dental students which result in the reduction of more than 25% of toxic waste in our campus.

The remaining toxic waste by clinics and hospitals which are hazardous for human health and environment are safely handed over to private contractor Karachi Metropolitan Corporation for safe incineration.

Toxic Waste Treatment



DR. ZIAUDDIN HOSPITAL
Infection Prevention and Control
Department Kiamari Campus

CDC Transmission-Based Precautions

CONTACT PRECAUTIONS

To prevent the spread of infection, ANYONE ENTERING THIS ROOM **MUST WEAR:**

- Gloves ✓
- Gown ✓

Apply whether in or contact with the patient or the patient's environment and belongings.

*Patient visitors do not need to wear gowns and gloves, but they **MUST WEAR** shoes when entering and leaving this room.

DROPLET PRECAUTIONS

To prevent the spread of infection, ANYONE ENTERING THIS ROOM **MUST WEAR:**

- Surgical Mask ✓

A fit respirator should be used for aerosol-generating procedures with patients in droplet precautions.

AIRBORNE PRECAUTIONS

To prevent the spread of infection, ANYONE ENTERING THIS ROOM **MUST WEAR:**

- N-95 Respirator ✓

Also ensure that the door to the patient's room remains closed at all times.

*Patient visitors should wear a face surgical mask while in the patient's room.

DR. ZIAUDDIN HOSPITAL

INFECTIOUS WASTE

Date: _____

Department: _____

SIGN: _____

Example of Label placed on the bags of Infectious wastes

DR. ZIAUDDIN HOSPITAL
INFECTION CONTROL DEPARTMENT
Sharp Container Handling Guidelines

EDH/INF/CONT/DOC/01

Sharps Containers

- Should be puncture-resistant, closed, and remain upright at all times.

Placement:

- As close as possible to the point of use

Replace when ¾ full

- Close and seal the container in red bag for transport to a secure area.
- Do not open, empty or reuse the containers.

Preventing Needle Sticks

- Do not recap used needles.
- Two hand capping is dangerous.

Additional Injection Precautions

- Do not remove used needles from disposable syringes by hand.
- Do not bend, break, or otherwise manipulate used needles by hand.
- Dispose of syringes, needles, scalpel blades, or other sharp objects in appropriate, puncture-resistant containers.
- Use Scoop method (for safe injections)

Proper labeled

- Sharp containers should be properly labeled with Ward Name, open and closed date.

Farkhanda Haroon
Asst Manager Infection Control

Reference: WHO 2016 & CDC 2014

Example of Safety measures at Ziauddin University Hospital

DR. ZIAUDDIN HOSPITAL
INFECTION CONTROL DEPARTMENT

EDH/INF/CONT/06
Issue date 20th July 2007
Revision: 3rd
Revision date 22nd Jan 2022

Title: Hospital Waste Management

Initiated: Ms. Farkhanda Haroon (Asst manager)
Ms. Hina Murad (Infection Control Officer)

Approved: Dr. Faizal Iqbal Afridi (Associate Prof Microbiology & Head of ICD)
(Head of I/C Committee)

Date of Reviewed: 22nd January 2022

Applicable: To all campuses

1. Definition:
Healthcare Waste is defined as solid or liquid waste arising from healthcare or health related facilities. This waste comprises two fractions, namely risk waste and non-risk waste as illustrated below

2. Healthcare Clinical Waste:
Healthcare Clinical Waste is majority is consist on Infectious waste (also called medical, biomedical or biohazard waste) is defined as materials generated as a result of the diagnosis or treatment of a patient and that is capable of producing an infectious disease.

3. PURPOSE:

- To establish guidelines on the proper disposal of waste
- To implement a program (for medical waste segregation collection and storage) that is consistent with laws and regulation for safe disposal of medical waste. Eg. Ministry of health (MOH) waste management guidelines.
- To reduce health and safety risks to staff, patients and visitors.
- To reduce waste disposal costs.
- To ensure that you and your employer comply with legislation, "Duty of care" to ensure waste is handled and disposed off safely and correctly.
- To provide a safe environment.
- To reduce hospital cost.

4. SCOPE:
This procedure is applicable to Infection Control Department services of all Campuses of Dr. Ziauddin Hospital (DZH).

5. Policy Statement:
To properly define the collecting, handling, transporting, and disposing of hazardous waste to ensure the safety of the Health Care Workers, Sanitary Workers, and the general public in

addition to cost reduction. Develop and support the treatment of waste in order to prevent environmental contamination and maintain public health.

Hospital Waste Management Policy

DR. ZIAUDDIN HOSPITAL
INFECTION CONTROL DEPARTMENT

EDH/INF/CONT/23

Title: Management of Blood and Body Fluid Spills

Initiated: Ms. Rifat Shaheen (Infection Control Officer)

Approved: Prof. Badar J. Farooqui (Head of I/C Committee)

Date: 20 July 2007

Reviewed By: Farkhanda Haroon (Asst Manager ICD)
Dr. Faizal Iqbal Afridi (Associate Prof Microbiology & Head of ICD)

Date Of Reviewed: July, 10 2017

Applicable: To all campuses

Purpose:

- To promote care givers safety.
- To create safe environment for patient and care givers
- To minimize the source of spreading infection
- Management of blood and body fluid is used to prevent transmission of infection.

SCOPE: This procedure is applicable to Infection Control Department services of all Campuses of Dr. Ziauddin Hospital (DZH), as per applicability of the required environment and set provision of facility present.

Splashes and drips

Procedure

- Wear non-sterile gloves for this procedure.
- Wipe the area immediately with paper towel soaked in hypochlorite (house hold bleach) 1:10 dilution solution; alternatively disposable alcohol swabs may be used.
- Rinse the surface with clean water if hypochlorite solution may be corrosive.
- Clean the area with water and detergent.
- Dry the surface with disposable paper towel.
- Discard gloves and paper towels as clinical waste according to infection control policy.
- Wash and dry hands immediately.

Larger Spills

Procedure

- For large spills, cover the spillage with the paper towel to absorb all liquid and carefully pour a freshly prepared hypochlorite (household bleach) 1:10 dilution solution.
- Leave the spill for a contact period of about 3 minutes to allow for disinfection.
- Depending on the method used, either scoop up the absorbed granules or lift the soiled paper towels and discard into red plastic waste bag as clinical waste.
- Wipe the surface area with freshly prepared hypochlorite (1:10 dilution) solution and rinse with clean water if hypochlorite solution may be corrosive.
- Dry the surface with disposable paper towel.
- Remove gloves & plastic apron and discard as clinical waste according to infection control policy. Wash and dry hands immediately.

Policy on disposal of hazardous fluid spills



DR. ZIAUDDIN HOSPITAL
INFECTION CONTROL DEPARTMENT

DZH/INF/CONT/20

Title: Safe Management of Contaminated sharps

Initiated: Ms. Farkhanda Haroon (Asst Manager ICD)

Approved: Dr. Faisal Iqbal Afridi (Prof Microbiology & Head of ICD)

Date: 20 July 2019

Applicable: To all campuses

Purpose:

- > To provide a safe and efficient means for handling and disposal of needles, syringes and sharp objects.
- > To guide care givers in safe use, handling and disposal of used sharps.
- > To promote care givers safety.
- > To create save environment for patient and care givers.

SCOPE: This procedure is applicable to Infection Control Department services of all Campuses of Dr. Ziauddin Hospital (DZH), as per applicability of the required environment and set provision of facility present.

Principles:

- All used sharps are considered contaminated. Contamination occurs as a result of contact with blood or body fluids, chemicals, drugs etc.
- Place all used sharps into puncture resistant sharps container labeled "DANGER", available in all patient care areas.
- Dispose needle and syringes as one unit uncapped into the sharps container at the point of use.
- Does no recap needle after use
- Needles removed from IV tubing should be disposed into sharps containers immediately.

DR. ZIAUDDIN HOSPITAL ESTD 1957

POLICY NO: DZH/CLIF/IPC/POLICY/03

REVISION NO: Original

APPROVAL DATE: November 2019

DEPARTMENT: Infection Prevention and Control Department

TITLE: Guideline for Cleaning, Disinfection and Sterilization.

- PURPOSE:**
 - To provide guideline for cleaning, disinfection and sterilization of items used in patient care areas.
- APPLICABLE TO:**
 - All healthcare provider working in patient care area of Dr. Ziauddin Hospital Clifton.
 - This policy applies to those reusable items, equipment's and medical device which require cleaning, disinfection and sterilization.
- AIM:**

The aim of the policy is to ensure:

 - There are clear lines of accountability for cleanliness for patient care items, equipment, medical devices and the environment.
 - All staff is correctly trained in cleaning techniques method.
 - All staff involved with cleanliness of patient care equipment, medical devices and the environment is clear on their individual roles and responsibilities.
 - Only clean equipment is stored in clean equipment area.
 - Equipment will not be stored on or immediately around the sink to avoid contamination.
 - All other equipment that is not clean or cannot be cleaned immediately after use shall be labeled to indicate that it is ready for reprocessing and placed in the dirty equipment area.
 - Only soiled equipment should be covered and stored in the soiled or dirty area and shall be labeled to indicate that it is ready for reprocessing.

Example of Toxic/ Hazardous Waste Handling Policy

Example of making Environment Clean, Green & Sustainable through Cleaning, Disinfection & Sterilization process practices at ZU Hospital

KARACHI METROPOLITAN CORPORATION
Office of the Director Solid Waste Management



NO : KMC/DIR/SWM/MS/ 026/2022
Date: 01-02-2022.

M/s H.M. & Company,
R-902, Block-19, F.B. Area,
Karachi.

Subject: REQUEST FOR APPROVAL OF INCINERATION OF HAZARDOUS & NON HAZARDOUS.

Reference: Your application dated 31-01-2022.

In response to your request cited above, this office has no objection if M/s H.M. & Company disposes their Hazardous & Non Hazardous waste Incineration Plant KMC as per rules with all codal formalities.


Director
Solid Waste Management
Karachi Metropolitan Corporation

DIRECTOR
SOLID WASTE MANAGEMENT
KARACHI METROPOLITAN CORPORATION

Example of Contract with Local governmental organization for Toxic Waste Collection for Incineration Process



KARACHI METROPOLITAN CORPORATION
Office of the Director Solid Waste Management

NO : DIR/SWM/KMC/MS/ 318 /2022

Date: 25/8/22

M/s Zia Uddin Hospital,
Karachi.

Subject: Certificate of Disposal.

It is certified that this office received medical hazardous waste from M/s Zia Uddin Hospital, Karachi for the purpose of Proper Disposal of Hazardous Waste through Incineration Plants of KMC from the month of July, 2021 to June, 2022.

Incineration Process:

The incinerator is pre-heated to the required temperature of 800°C in the primary chamber before waste/material is loaded for incineration through hydraulic loader while the temperature in the Secondary Chamber is maintained up to 1200°C during the incineration process.



(Signature)
Addl. Director
Solid Waste Management
Karachi Metropolitan Corporation

Payments deposited vide KMC Challan No.66186 & Book No. 5124.

Example of Toxic Waste handed over to KMC for incineration



VR Dental Simulator are Example of Cut Down the usage of Chemicals that reduced the toxic waste in our university



Anatomy 3D Virtual Dissection Table are Example of Cut Down the usage of Chemicals that reduced the toxic waste in our university



To meet the standards of proper hygiene and health safety, Ziauddin University Hospital centralizes the waste management system with the public waste management body. for toxic waste that is harmful for human health and the environment.

Ziauddin University has a contract with Karachi Metropolitan Corporation (KMC) for collection of clinical hazardous and infectious waste for proper collection and disposal through the incineration process. KMC authorized staff collects red bags for the incineration process in accordance with all applicable local, state and federal laws and regulations.

ZU also has made sound policies for disinfectant and cleaning with proper implementation to make the Environment Clean, Green & Sustainable. ZU Management is also analyzing these policies every year and revised as per the requirements.

VR Dental Simulator and 3D Virtual Dissection table are used by medical and dental college students to excel their profession and clinical career in a sustainable manner with no use of toxic chemicals, tools, cadavers etc., that reduced the 26% of toxic waste (clinical and chemical) in the university.

Sewage Disposal

Dr. Ziauddin Group took an initiative to recycle sewage water with the project name **Waste Water Treatment** in contract with the private firm Water World International to providing their service on contract basis. Waste Water Treatment Plant was established at Ziauddin University Clifton Family Park extension. This Sewage Treatment Plant is a complete system that ensures purification of dirty water before it is disposed off in the environment. In Ziauddin University more than 70% of sewage water is purified through water recycling process and the treated water then used for forest plantation and for gardening. Therefore Ziauddin University has a tertiary treatment policy for sewage disposal.

How does it work?

1. Collection

To begin with, the Wastewater Treatment system first collects effluents from sewerage pumping station in huge tanks and then sent further down the line for treatment.

2. Screening

Using pre-installed screening systems, the plant than physically screens out the bigger particles like metal and cloth pieces, plastic and glass, anything that is visible to the naked eye.

3. Flocculation and Coagulation

Once the bigger particles are removed, next the system works on tinnier particles. The flocculation process includes combining the destabilized particles so that they separate from the water. Coagulants are than added that makes heavier particles settle down and filter out without any further addition of chemicals.

4. Neutralization and Disinfection

Different chemicals are added in water (especially chlorine) to help maintain the pH of the water and kill bacteria which makes it good enough for consumption and usage.

5. Storage and Distribution

Once the water is free from all sorts of toxins and chemicals, it is collected in a tank and distributed farther to serve various purposes. In most cases, the industries that use such systems of wastewater recycling utilize the water themselves for completion of process rather than going for freshwater supply.

Benefits of Wastewater Treatment Plant

Here are a few benefits of wastewater treatment system:

- Helps industries in cutting down costs of fresh water acquisition
- Reduces water pollution and saves the environment
- The plant filters water, making it worthy for agriculture field & for gardening
- Reduces waste from industries that is destroying the planet



Example of Sewage Disposal Treatment at Ziauddin University

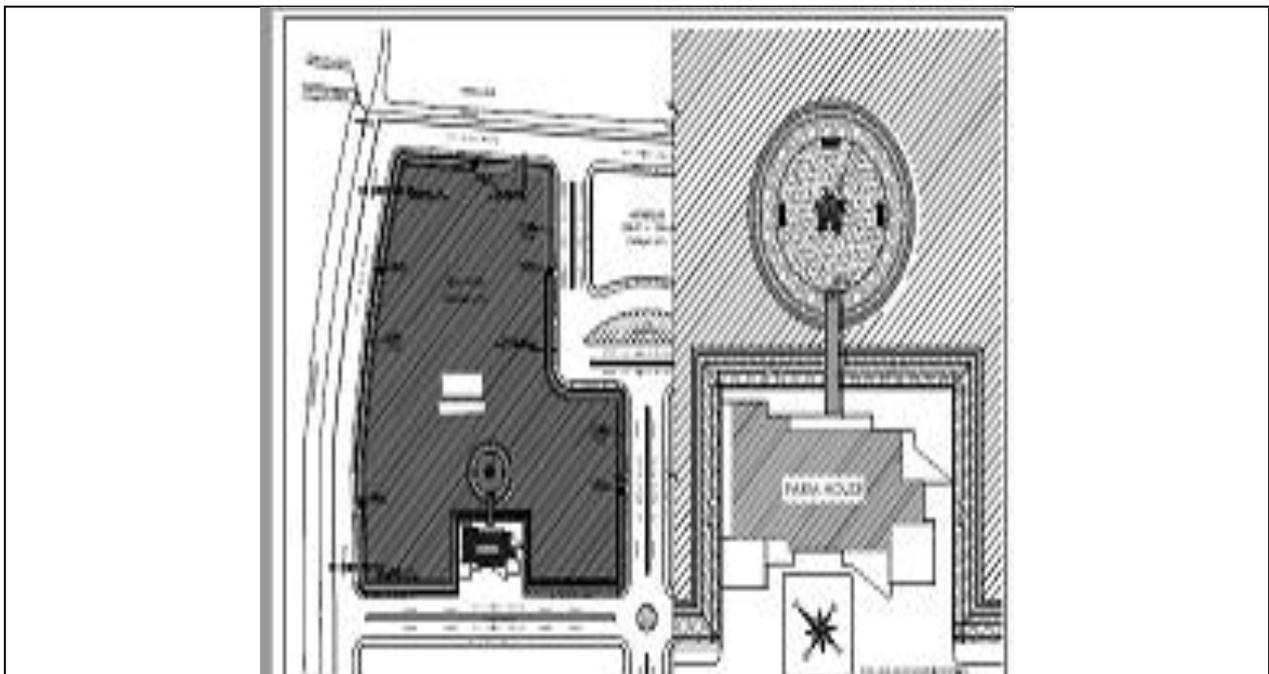
4. Water (WR)

Water resource management is the activity of planning, developing, distributing and managing the optimum use of water resources. At Ziauddin University, water consumption and utilization are according to the standard need which represents no water wastage along with water efficient appliance usage.

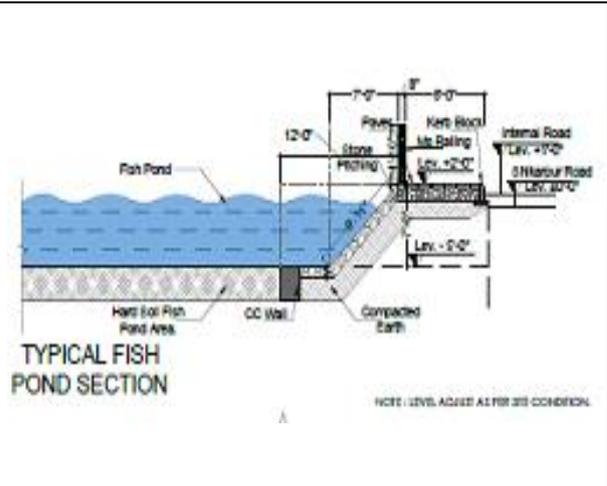
Water management and its treatment are at par with global policies and procedures.

Water Conservation Program Implementation

1. Most of the buildings of the Ziauddin University have a separate system, for waste water and for clean water (rainwater). Rain water is thus collected from the roofs of the buildings and is then discharged into the local ponds and canals around the buildings. The university also has buildings where all the rainwater is collected for toilet flushing and for watering the plants inside the building. At our campus we have a separate sewerage system. We collect rainwater from the roof, parking area etc. and discharge this in the ponds and channels at our campus.
2. Clifton side is located near the sea, and the average TDS of seawater is 45000, therefore, RO plants are used for recycling the seawater for general and drinking usages. The water is stored in underground tanks. The average capacity of the underground water tank of the Ziauddin University Clifton is 110,000 gallons/day
3. On the other hand, Ziauddin University, North Nazimabad Site, uses the bore water and RO plants are used for recycling the bore water for general and drinking usages. The water is stored in underground tanks. The average capacity of the underground water tank of Ziauddin University, North Nazimabad is 76,500 gallons/day.
4. The average water tank capacity of Ziauddin University is 1.865 lacs gallon/day.



Drawing of Conservation of Rain Water Collection (Ziauddin University)



Water Conservation - In Ground Water Tank

Construction Level of Pond (Ziauddin University)



Water Storage tanks at different location of Ziauddin University

Water Recycling Program Implementation

The Clifton site of the Ziauddin University is located near the sea, and the average TDS of seawater is 45000, therefore, **RO plants** are used for recycling the seawater that reduces the TDS to 450 - 500. This water is used for general usage. For drinking, the water is further treated by another small RO plant.

The other campuses of Ziauddin University use the **bore water** after RO treatment. Water is filtered with R.O plants at Clifton and North campus. Ziauddin Clifton Campus underground water tank facility is 110,000 gallons per day and 76,500 gallons of water tank capacity at Ziauddin North Campus. The average recycling capacity of R.O plants at North campus is about 80,012 from which 52,008 gallons of water are consumable and the remaining 28,004 gallons are non-consumable/ nor drinking water. The distribution of water is done by the maintenance department.

A **Sprinkler (water meter)** is installed to measure the amount of water that has been used. This is to balance the supply of water in plants and fields so that each plant grows and takes water according to their requirement. Through this we have changed the old method of watering plants to a drip **irrigation system** and reduced the water wastage and sprinkler only opens when plants need water and they supply in the needed quantity because each drop is important for us. The R.O plant rejected water is about 28,004 gallons is used for recycling purpose in washroom cleaning and flush and drip irrigation etc.

Most of the buildings of the Ziauddin University have a separate system, for waste water and for clean water (rainwater). Rain water is thus collected from the roofs of the buildings and is then discharged into the local ponds and canals around the buildings. The university also has buildings where all the rainwater is collected for toilet flushing and for watering the plants inside the building. At our campus we have a separate sewerage system. We collect rainwater from the roof, parking area etc. and discharge this in the ponds and gardening plants through sprinkler (drip irrigation system).



R.O Plant at Ziauddin University



Sprinkler used to proper supply Recycled Water for Plantation

Water Efficient Appliances Usage

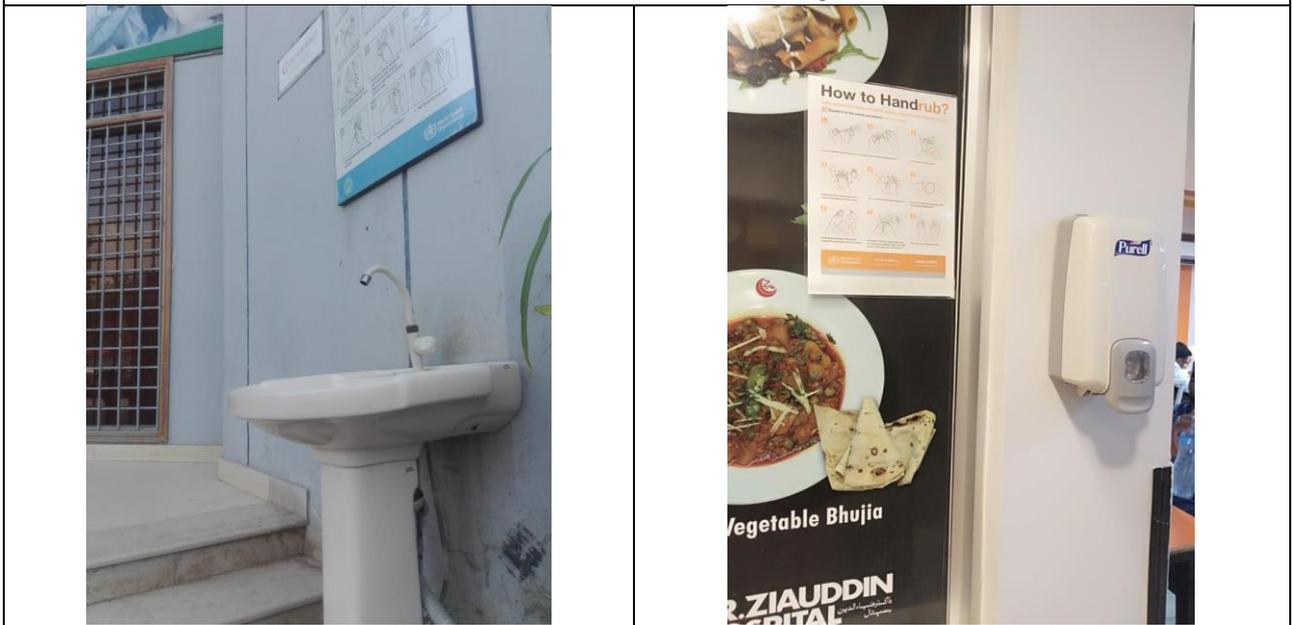
Ziauddin University ensures usage of water efficient appliances in its campuses, which are more than 50%



Wastel/ wash basin, Hand Dryer & Soap Dispenser



Hand Sanitization Facilities in the Campus



Water Efficient Appliances

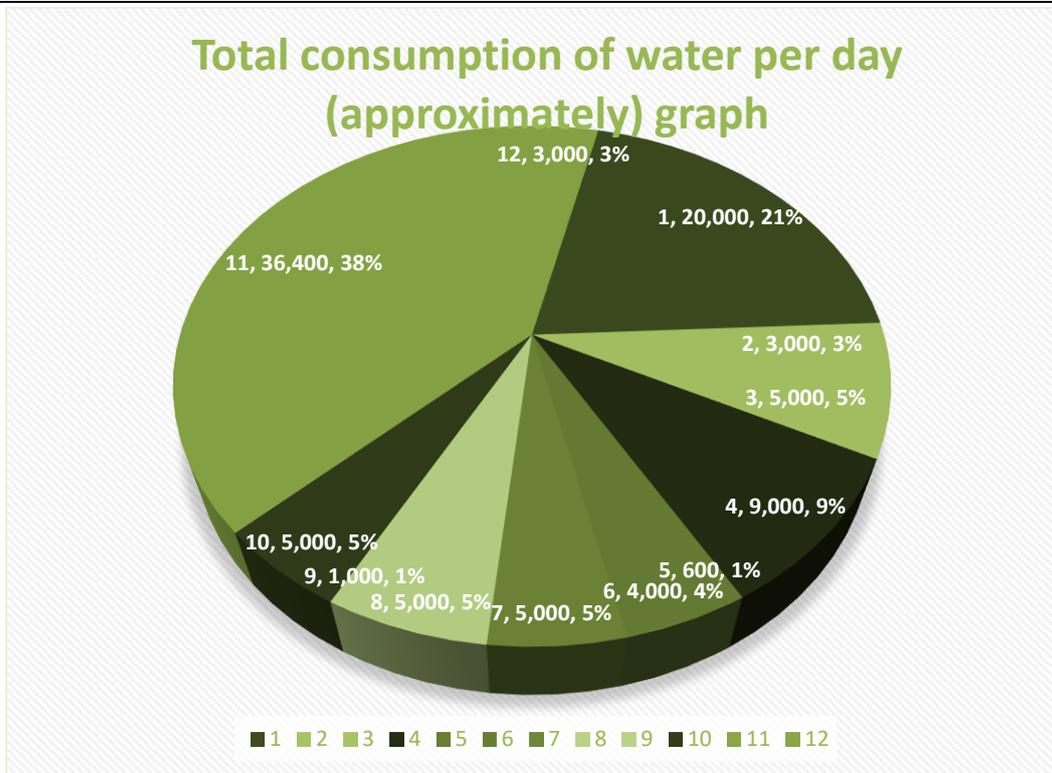
Consumption of treated water

- Water installation of treated-water and it is consumed by students, staff and Patients, it is located at Ziauddin Hospital North & Clifton Campus & Universities. More than 75% of treated water are consumed at Ziauddin University.
- Ziauddin Hospital & Clifton Campus & Universities have reserved water for 3 days in underground water tanks due to incase of water crisis in the city & also level maintenance in 6 feet due to the pump not picking water from level 8 Inch.
 - (Total Capacity of Underground Tank 110000 at Clifton and 76500 at North).
- The average daily consumption of treated water at Ziauddin University is about 97,000 gallons at Clifton Campus and 84,408 at Ziauddin North campus which is about 181,408 daily consumptions.



Example of Consumption of treated water in Ziauddin University

| Details of Daily Water Consumption Sheet Per Day | | | |
|--|--|--------|--------|
| 1 | Chiller plant is taking water Gallon per day by 2hp water pump for both cooling towers. (12000 - 15000) (As per requirement) | 20,000 | Gallon |
| 2 | Chiller plant is also taking water for servicing of AHU. | 3,000 | Gallon |
| 3 | Housekeeping is taking water in every day due to cleaning of outside area & given water to garden & plants. | 5,000 | Gallon |
| 4 | Dialysis water/Lab water (Low TDS) Water | 9,000 | Gallon |
| 5 | Cooling tower (both) of Engine 1.2 MW is used water due to engine cooling. | 600 | Gallon |
| 6 | Maintenance/ service of the RO plant | 4,000 | Gallon |
| 7 | FSD, water use for making breakfast, lunch & dinner & also washing work | 5,000 | Gallon |
| 8 | Linen store, water use for washing of cloths (tank size: 4' x 3' x 3'=36 cft x 6.2 cft = Gallon x 10 times =GPD x day x CPG = CPM) | 5,000 | Gallon |
| 9 | House Keeping, water use for washing of washroom | 1,000 | Gallon |
| 10 | CSSD, water for washing (2 machine) (500 gallon per cycle x 5 cycle x per machine) | 5,000 | Gallon |
| 11 | Hospital, water use other areas (Zone A, B, C, D, E) OT, SICU, MICU, HDU, Pantry & water coolers) | 36,400 | Gallon |
| 12 | Water use in Nursing Hostel Flats. (Daily Basis) (Flat # H-208, J-209, L-411, H-108, K-110, C-103) | 3,000 | Gallon |
| Total Consumption of Water per day (Approximately) | | 97,000 | Gallon |
| Note: | We have reserved water for 3 days in under ground water tank due to incase of water crisis in city & also level maintain in 6 feet due to the pump is not picking water from level 8 Inch. (Total Capacity of Under Ground Tank 1,10,000/-) | | |
| Manager Maintenance & Services | | | |



Example of Consumption of treated water in Ziauddin University & Hospital at Clifton Campus



| All Three Shifts | | In 24 Hrs. | | | | | Mailing Date: | 27/10/2023 | Reporting Date: | 26/10/2023 |
|---|--------------------|------------------|--------------------|------------------|---------------|------------------|--------------------|------------------|-----------------|------------|
| TIME | MAIN U/GROUND TANK | | R.O Finish Product | | R.O RAW Water | | R.O Rejected Water | R.O Well Water | REMARKS | |
| | Level-feet | Capacity-Gallons | Level-feet | Capacity-Gallons | Level-feet | Capacity-Gallons | Capacity-Gallons | Capacity-Gallons | | |
| 8:00 | 5.5 | 16,363 | 10 | 36,850 | 8 | 29,480 | 35,716 | 102,046 | | |
| 9:00 | 6.5 | 19,338 | 10 | 36,850 | 8 | 29,480 | 35,716 | 102,046 | | |
| 10:00 | 6.5 | 19,338 | 10.5 | 38,693 | 8 | 29,480 | 36,708 | 104,881 | | |
| 11:00 | 7 | 20,825 | 10.5 | 38,693 | 8 | 29,480 | 36,708 | 104,881 | | |
| 12:00 | 7 | 20,825 | 10.5 | 38,693 | 8.5 | 31,323 | 37,700 | 107,715 | | |
| 1:00 | 7 | 20,825 | 10 | 36,850 | 8.5 | 31,323 | 36,708 | 104,881 | | |
| 14:00 | 6.5 | 19,338 | 10 | 36,850 | 8.5 | 31,323 | 36,708 | 104,881 | | |
| 15:00 | 6.5 | 19,338 | 10.5 | 38,693 | 9 | 33,165 | 38,693 | 110,550 | | |
| 16:00 | 6 | 17,850 | 9 | 33,165 | 9 | 33,165 | 35,716 | 102,046 | | |
| 17:00 | 7 | 20,825 | 9 | 33,165 | 9 | 33,165 | 35,716 | 102,046 | | |
| 18:00 | 6.5 | 19,338 | 9.5 | 35,008 | 8 | 29,480 | 34,724 | 99,212 | | |
| 19:00 | 5.5 | 16,363 | 10 | 36,850 | 8 | 29,480 | 35,716 | 102,046 | | |
| 20:00 | 4.5 | 13,388 | 10 | 36,850 | 8 | 29,480 | 35,716 | 102,046 | | |
| 21:00 | 4.5 | 13,388 | 10.5 | 38,693 | 9 | 33,165 | 38,693 | 110,550 | | |
| 22:00 | 3 | 8,925 | 10.5 | 38,693 | 9 | 33,165 | 38,693 | 110,550 | | |
| 23:00 | 3 | 8,925 | 10.5 | 38,693 | 9 | 33,165 | 38,693 | 110,550 | | |
| 0:00 | 2.5 | 7,438 | 10 | 36,850 | 3.5 | 12,898 | 26,787 | 76,535 | | |
| 1:00 | 3 | 8,925 | 10 | 36,850 | 3.5 | 12,898 | 26,787 | 76,535 | | |
| 2:00 | 4 | 11,900 | 10 | 36,850 | 3.5 | 12,898 | 26,787 | 76,535 | | |
| 3:00 | 4 | 11,900 | 10 | 36,850 | 3.5 | 12,898 | 26,787 | 76,535 | | |
| 4:00 | 4.5 | 13,388 | 10 | 36,850 | 3.5 | 12,898 | 26,787 | 76,535 | | |
| 5:00 | 5 | 14,875 | 10 | 36,850 | 3.5 | 12,898 | 26,787 | 76,535 | | |
| 6:00 | 6 | 17,850 | 10 | 36,850 | 8 | 29,480 | 35,716 | 102,046 | | |
| 7:00 | 5 | 14,875 | 10.5 | 38,693 | 8.5 | 31,323 | 37,700 | 107,715 | | |
| Total in 24Hrs RO Water & Well and Finish Product | | | | 52,008 | | | 28,004 | 80,012 | 0 | |

| K.D.A WATER LINE METER READING | | | | |
|--------------------------------|------------------|-----------------|------------|---|
| TIME | PREVIOUS READING | CURRENT READING | Difference | TOTAL CAPACITY IN GALLONS |
| 9:00 | 238788 | 238788 | 0 | 4" dia KDA Meter Reading |
| | 33008 | 33094 | 86 | 3" dia KDA Meter Reading |
| 9:00 | 97513 | 97513 | 0 | R.O Transfer To Main Tank Meter Reading |

| PHYSIOTHERAPY WATER LINE METER READING | | | | |
|--|------------------|-----------------|------------|---------------------------|
| TIME | PREVIOUS READING | CURRENT READING | Difference | TOTAL CAPACITY IN GALLONS |
| 9:00 | 5916 | 5916 | 0 | - |

| 23:45 | | | | |
|-------|------------------|-----------------|------------|---------------------------|
| TIME | PREVIOUS READING | CURRENT READING | Difference | TOTAL CAPACITY IN GALLONS |
| 9:00 | 230567.56 | 230630.2 | 62.64 | 16,536.96 |
| 9:00 | 247228.99 | 247321.59 | 92.6 | 24,446.40 |
| 9:00 | 131321.41 | 131392.16 | 70.75 | 18,678.00 |

| TIME | Date | WATER TANKER, # | SLIP, # | Cap. Gallons | ORDER BY INCHARGE & C. # | Plumber Name | Security | FRONT OFFICE | AUDITOR | Remarks |
|---------------------------------|------|-----------------|---------|--------------|--------------------------|--------------|----------|--------------|---------|---------|
| Total RO Finish Product | | | | 52,008 | | | | | | |
| Total KDA Main Water Line Water | | | | 22,704 | | | | | | |
| Tanker Water Recv'd | | | | - | | | | | | |
| Over all Water Generation | | | | 74,712 | | | | | | |

| Storage Facilities | | |
|--------------------|--|----------|
| Under Ground Tank | | 28000 |
| Finish RO Tank | | 35000 |
| Overah Tank | | 8000 |
| Hot Water | | 5500 |
| | | 76,500.0 |

| Total Supply to Hospital | | |
|---|--------|--|
| Dialysis Plant & Lab Supply | 59,661 | New O2 Nos Meter installed for supply of Hospital Supply |
| Ro Plant Service/Flusing washing student Hostel (unmetered) | 16,246 | 10560 After Treated up to 20 TDS Uses in Dialysis Equipment (including re- |
| | 3,000 | |
| | 5,500 | |
| Total Water Consumption | 84,408 | Main Tank 16,363 |
| Water in Hand R.O & Main Under Ground Tank | 53,213 | R.O Tank 36,850 |

Example of R.O Plant Recycle, Total Conservation Capacity & Consumption of treated water in Ziauddin University North Campus

Water pollution control in campus area

Ziauddin University not only focused on a clean and green environment but also aimed to produce clean water for the consumer and surrounding communities. The Maintenance Department has installed a proper system for water quality check and pollution control in the entire Ziauddin University and Hospital. There are three shifts of staff in morning, evening and night to assess water level, TDS level and maintenance of water plants. The sources of water at Dr. Ziauddin Group are Main water tanks, R.O Plants, KDA line water, R.O raw water. The staff has to check the level of water every hour in his shift.

The maintenance head ensures the maintenance of machines/ equipment are done regularly as per the defined schedule. Daily inspection and cleaning of pumps, pump motors, electric panel, electric wires and motor



coupling etc., are done by the maintenance team and daily analysis progress report is signed by the maintenance manager. Weekly progress reports are also generated to check leakage, water level, safety valve, pressure switch, pressure gauge, gauge glass and cleaning and servicing of the boilers. All these regular weekly and monthly processes are done at Ziauddin hospital to ensure that all the machinery/ equipment used in water distribution and consumption are in good condition and have proper maintenance to minimize the chances of breakdowns during operations.

Ziauddin University follows the proper mechanism to ensure the water quality of the campus water system. Dr. Ziauddin hospital has its own clinical Laboratory for microbiology tests which is ISO certified. Ziauddin Group practices monthly water cultural tests of all water sources and all their locations to ensure that the water is bacteria free, non-polluted and satisfactory for human and environment consumption.

Therefore, Water pollution control mechanism is Fully Implemented & Monitored Regularly at Ziauddin University.

| Daily Report of Water Tank Level | | | | | | | |
|----------------------------------|---------|------|---------------|---------|----------------------------------|----------|-------|
| Date: | 26/9/22 | | | | | | |
| Time | Feet | Inch | Main Tank TDS | Plumber | Hospital | | |
| | | | | | A. Shaikh ²⁹ Location | | |
| 09:00AM | 4 | 11 | 460 | | 9 AM TO 9 AM | | |
| 10:00AM | 4 | 10 | 460 | | 14000 | Gate 6 | 1/2 |
| 11:00AM | 4 | 9 | 460 | | 13000 | Gate 5 | 1/2 |
| 12:00PM | 4 | 8 | 460 | | 7000 | Plot | 1/2 |
| 01:00PM | 4 | 7 | 460 | | 4500 | D20 | |
| 02:00PM | 4 | 6 | 460 | | 3000 | D24 | |
| 03:00PM | 4 | 5 | 460 | | 1500 | Pharmacy | |
| 04:00PM | 4 | 5 | 11 | | Total-GL | 15000 | |
| 05:00PM | 4 | 4 | 11 | | | Hostel | 1 |
| 06:00PM | 4 | 3 | 11 | | A. Ahmed Hospital 2 + 1/2 | | |
| 07:00PM | 4 | 5 | 11 | | 9 AM TO 9 AM | | |
| 08:00PM | 4 | 4 | 11 | | 11000 | | |
| 09:00PM | 4 | 3 | 11 | | 13000 | | |
| 10:00PM | 4 | 2 | 11 | | 14000 | | |
| 11:00PM | 4 | 1 | 460 | | 6000 | | |
| 12:00AM | 4 | 3 | 460 | | 7000 | 2. | |
| 01:00AM | 3 | 11 | 460 | | 3000 | | (81) |
| 02:00AM | 3 | 10 | 460 | | 2500 | | |
| 03:00AM | 3 | 9 | 460 | | Total-GL | 14000 | |
| 04:00AM | 3 | 8 | 460 | | NLC | | |
| 05:00AM | 3 | 7 | 460 | | 9 AM TO 9 AM | | |
| 06:00AM | 3 | 6 | 460 | | 10000 | | |
| 07:00AM | 3 | 5 | 460 | | 8000 | | |
| 08:00AM | 3 | 4 | 460 | | 7000 | 2 | (106) |
| Supervisor Maintenance | | | | | Total | 14000 | |

Example of Daily Water Dialysis Progress Report at Clifton Site



W.W.I WATER WORLD International

ACKNOWLEDGE DATE: 21-10-2023
REPORTING DATE: 20-10-2023

TIME: _____

OLD R.O PLANT DAILY PROGRESS REPORT

| CHECK LIST | OBSERVATION | TDS |
|-------------------------------|-------------------|-----|
| PREVIOUS READING | 3128 | |
| CURRENT READING | 3128 | |
| TOTAL CAPACITY IN LITERS (M3) | 0 | - |
| TOTAL CAPACITY IN GAILON | R.O out of order. | |

NEW R.O # 2 PLANT DAILY PROGRESS REPORT

| CHECK LIST | OBSERVATION | TDS |
|-------------------------------|-------------|-----|
| PREVIOUS READING | 67936 | |
| CURRENT READING | 68007 | |
| TOTAL CAPACITY IN LITERS (M3) | 71 | 560 |
| TOTAL CAPACITY IN GAILON | 18744 | |

NEW R.O # 3 PLANT DAILY PROGRESS REPORT

| CHECK LIST | OBSERVATION | TDS |
|-------------------------------|-------------|-----|
| PREVIOUS READING | 98195 | |
| CURRENT READING | 98261 | |
| TOTAL CAPACITY IN LITERS (M3) | 66 | 540 |
| TOTAL CAPACITY IN GAILON | 17424 | |

NEW R.O # 4 PLANT DAILY PROGRESS REPORT

| CHECK LIST | OBSERVATION | TDS |
|------------------------------------|---------------------|-----|
| PREVIOUS READING | 33906 | |
| CURRENT READING | 33984 | |
| TOTAL CAPACITY IN LITERS (M3) | 78 | 535 |
| TOTAL CAPACITY IN GAILON | 20592 | |
| TOTAL CAPACITY IN GAILON NEW & OLD | 56760 | |
| R.O WATER TRANSFER TO MAIN TANK | Meter out of order. | |

W.W.I OPERATOR

DY MANAGER /SR. MANAGER

G.M ADMIN

R.O MANAGER

GROUP DIRECTOR P&D

DEPUTY MEDICAL DIRECTOR

PREPRED BY M.KHALID MEHMOOD

Example of Daily Water Dialysis Progress Report at North Site



DR. ZIAUDDIN HOSPITAL
CLINICAL LABORATORY
 (Participating in College of American Pathologists Proficiency Testing)

| | | |
|---------------------------------|--------------------------|----------------------|
| Name: C/O Dr. Ziauddin Hospital | Ref. Phy: | Lab No: 100423230722 |
| ZH: | Sample Recvd: 15/07/2022 | Dept No: 14/2022 |
| OPD/Comp: | OPD: | Card No: |
| Test Req: QUALITY CONTROL | Source: Water RO-01 | Location: Clifton |

QUALITY CONTROL / MICROBIOLOGY

Specimen data:
 C/O Dr. Ziauddin Hospital Clifton Campus.
 One Blue top sterile container was received marked as water RO-01.

Culture:
(Final Report):

| | |
|---------------------------------------|-----------------|
| Total Bacterial Colony Count | : 00 cfu /ml |
| Total Coliform Organism | : 00 cfu/100 ml |
| Fecal <i>E.coli</i> | : Not Isolated |
| Fecal <i>Streptococci/Enterococci</i> | : Not Isolated |
| <i>Pseudomonas aeruginosa</i> | : Not Isolated |

Remarks:
 The sample submitted is bacteriologically satisfactory and fit for human consumption.
 The above result cannot be used for advertising purpose.

Recommended value for drinking water

| Organism | Recommended value |
|---------------------------------------|--------------------|
| Total Bacterial Colony Count | : Less then 500/ml |
| Total Coliform Organism | : 00/100 ml |
| Fecal <i>E.coli</i> | : 00/100 ml |
| Fecal <i>Streptococci/Enterococci</i> | : 00/100 ml |

Presence of *E.coli*, Fecal *Streptococci* and *Enterococci* is suggestive of fecal Contamination.

Technologist: _____
 Prepared By: HM Ver 2.0
Clinical Microbiologist: - Dr. Faisal Iqbal Afridi (Ext: 206)
M.B.B.S, FCPS (Clinical Microbiology)

Pathologist: _____
 Date of Print: 22/07/2022

NORTH NAZIMABAD CAMPUS
 Block-B, North Nazimabad, Karachi-74700.
 Tel: 36648237-9 Fax: (9221) 36640970

CLIFTON CAMPUS
 4/B, Shehr-e-Ghalib, Block-E, Clifton, Karachi-75600.
 Tel: 35862937-39 Fax: (9221) 35837212

NAZIMABAD CAMPUS
 Plot No. 5, Block-3, Nazimabad, Karachi-18.
 Tel: 36611873, 36680912

KEAMARI CAMPUS
 Plot No. 33, Behind KPT Hospital, Keamari.
 Tel: 32851881-5 Fax: (9221) 32851881

20-364

Example of Water Cultural Test Report to check water quality at Clifton Site



DR. ZIAUDDIN HOSPITAL CLINICAL LABORATORY

(Participating in College of American Pathologists Proficiency Testing)



| | | |
|-----------------------------|------------------------------|------------------|
| Name: C/O Infection Control | Ref. Phy: | Lab No: 219482 |
| ZH | Sample Recvd: 09/08/2023 | Dept No: 38/2023 |
| OPD/Comp: | OPD | Card No: |
| Test Req: QUALITY CONTROL | Source: RO Mixing tank water | Location: Main |

QUALITY CONTROL / MICROBIOLOGY

Specimen data:

C/O Infection Control Dr. Ziauddin Hospital North Campus.
One Red top sterile container was received marked as RO Mixing tank water.

Culture:

(Final Report):

| | | |
|---------------------------------------|---|---------------|
| Total Bacterial Colony Count | : | 00 cfu /ml |
| Total Coliform Organism | : | 00 cfu/100 ml |
| Fecal <i>E. coli</i> | : | Not Isolated |
| Fecal <i>Streptococci/Enterococci</i> | : | Not Isolated |
| <i>Pseudomonas aeruginosa</i> | : | Not Isolated |

Remarks:

The sample submitted is bacteriologically satisfactory and fit for human consumption.
The above result cannot be used for advertising purpose.

Recommended value for drinking water

| Organism | Recommended value |
|---------------------------------------|--------------------|
| Total Bacterial Colony Count | : Less than 500/ml |
| Total Coliform Organism | : 00/100 ml |
| Fecal <i>E. coli</i> | : 00/100 ml |
| Fecal <i>Streptococci/Enterococci</i> | : 00/100 ml |

Presence of *E. coli*, Fecal *Streptococci* and *Enterococci* is suggestive of fecal Contamination.

Technologist:

Prepared By: HM Ver.2.0.

Pathologist:

Date of Print: 16/08/2023

Clinical Microbiologist: - Dr. Faisal Iqbal Afridi (Ext: 206)
M.B.B.S, FCPS (Clinical Microbiology)

20-364

NORTH NAZIMABAD CAMPUS
Block-B, North Nazimabad, Karachi-74700.
Tel: 3664237-8 Fax: (9221) 36640070

CLIFTON CAMPUS
416, Shahrah-e-Qadri, Block-B, Clifton, Karachi-75000.
Tel: 35862837-39 Fax: (9221) 35637212

NAZIMABAD CAMPUS
Plot No. 5, Block-3, Nazimabad, Karachi-18.
Tel: 36611073, 36608912

KEAMARI CAMPUS
Plot No. 33, Dabhal RPT Hospital, Keamari, Karachi.
Tel: 32851881-5 Fax: (9221) 32851601

Example of Water Cultural Test Report to check water quality at North Site

Example of water pollution Control at Ziauddin University

5. Transportation

The total number of vehicles (cars and motorcycles) on inside the campus parking

| S. No. | Vehicle | Total Number |
|--------|-------------------------------------|--------------|
| 1 | Car managed by the university | 44 |
| 2 | Cars entering the university | 44 |
| 3 | Motorcycles entering the university | 174 |
| | Total | 262 |

Total ground parking of Ziauddin University is 17032.54 which is about 3.62% of Total area. The following are pictures of a bike and car parking lot inside Ziauddin University.



Inside & Outside Parking of Ziauddin University



Inside Bike Parking of Ziauddin University

Shuttle Services

- **Inside The Campus: Use of shuttle service is not possible (Not Applicable)**

All Campuses or sites of Ziauddin University are **pedestrian friendly**. There is no such space to travel inside the campus via car as approx. travel distance is about **0.1 kilometer**. That is why **inside the campus use of shuttle service is not possible**. Ziauddin University’s campuses are purposely designed in a way that have **multiple entrances** and have **vehicle-free paths** to reach towards campus buildings. Ziauddin University not only pledged to become carbon free but to build a healthy society to promote walking trend in university students as well as faculty and administrative staff as human health is deteriorating day by day due to carbon emission. Therefore, Ziauddin University is keenly working to make its campus not only carbon free but to save the environment and reduce air and noise pollution too.

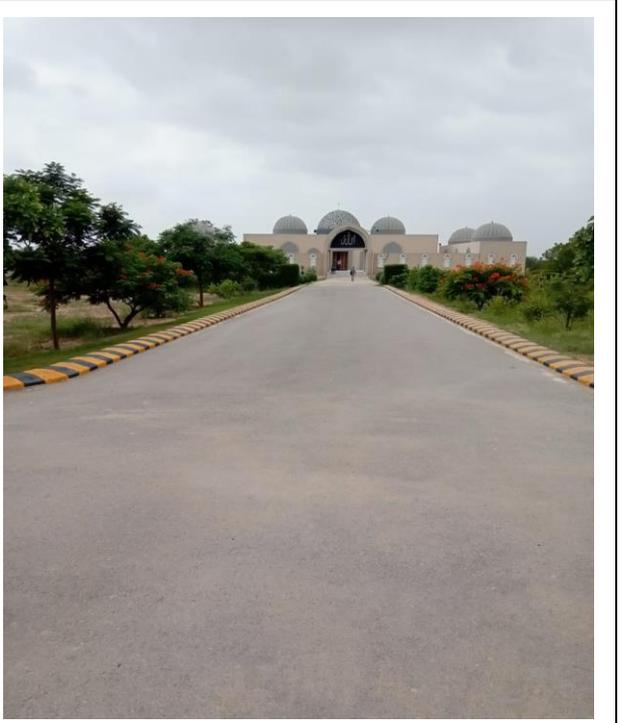
- **Outside the Campus: Free of Cost Shuttles Available for Students Daily Commute to University**

Ziauddin University pledged to become carbon free therefore it provides regular and free shuttle bus service from different areas of Karachi to Ziauddin University Link Road Site Educational City, Karachi. The **ZU Shuttle service is available free** for all the staff, students and faculty. The objectives of these free of cost shuttles are to minimize the use of private vehicles, optimization of the parking spaces, and reducing carbon emission.

Each year the university is increasing their shuttles to accommodate maximum people on buses and reduce maximum private cars for their travel to university. Approximately, **38 Shuttle buses** are operating including Hiace, Coaches and Coasters. There are **multiple Pickup Points within the city** for the feasibility of faculty & students such as Qayummabad, Clifton, North Nazimabad, Kemari, PIDC, Garden, Liaquatabad, Gulistan-

e-johar and Baldia etc. Each Shuttle is fully equipped with passengers on a daily basis therefore, the average passenger would be in Hiace 12 Passengers, in Coach 52 and in coaster maximum 30. Each shuttle takes **1 trip each day** according to the students' classes schedule which is **8:50 Time in and 3:30 Time Out**. The shuttle In and Out time is also fixed as per students' classes schedule. Pick up Times may vary according to the locality and mile distance from the campus. These 38 shuttles accommodate approximately **1500+** students per trip which means an average reduction of **300+** private vehicles.

Inside The Campus Shuttle Use is Not Possible (Not Applicable)



Example of Pedestrian Friendly campus as 0.1 KM Travel distance and Vehicle-free path, that's why Use of shuttle service is not applicable inside the campus



Entrance 1 & Entrance 2 for Faculty of Health Sciences & Faculty of Law

Entrance 6 for Faculty of Liberal Arts & Human Sciences



Entrance of Faculty of Engineering Science Technology & Management (Dept : Electrical, software & Management Technology)



Entrance of Faculty of Engineering Science Technology & Management (Dept: Biomedical, Civil & Architecture Engineering)



Entrance of Faculty of Nursing & Midwifery



Faculty of Pharmacy & Faculty of Animal Sciences Entrance

Example of Pedestrian Friendly campus with Multiple Entrances & vehicle-free path that's why Use of shuttle service is not applicable inside the campus

Outside The Campus Within City Free Shuttle Service



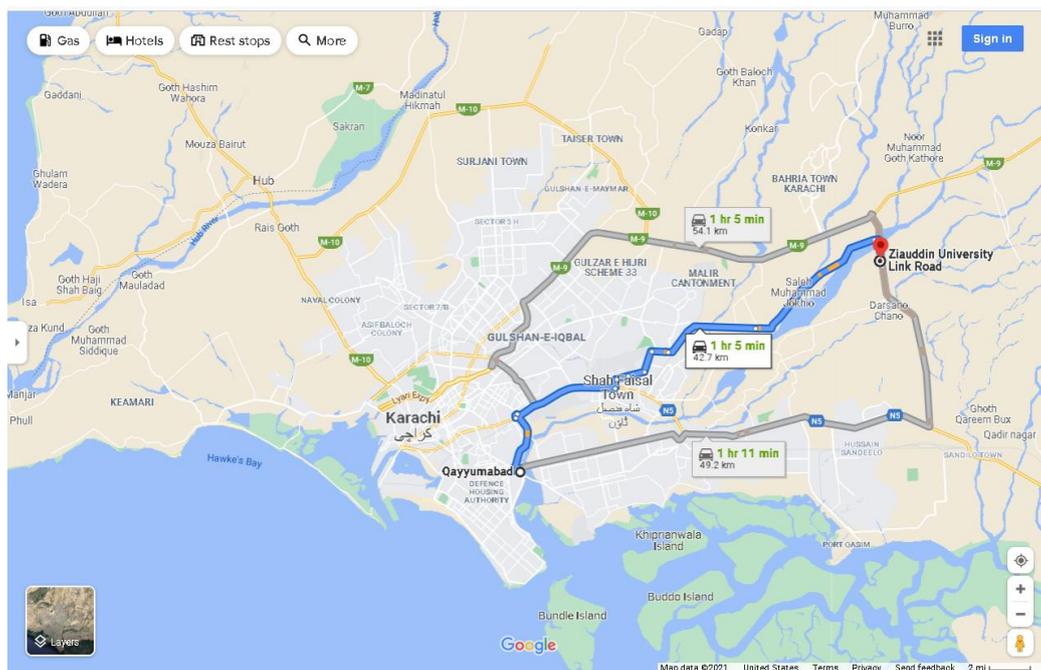
Example of Outside the campus Free of cost shuttle services available for students and staff's daily commute from their nearby areas to Ziauddin University Link Road site

ZIAUDDIN UNIVERSITY

SHUTTLE TIMETABLE

| SNO. | PICK UP POINT | DROP OFF POINT | TIME IN | TIME OUT |
|------|------------------|----------------|---------|----------|
| 1 | CLIFTON | LINK ROAD | 8:50 AM | 3:30 PM |
| 2 | QAYUMABAD | LINK ROAD | 8:50AM | 3:30PM |
| 3 | KEMARI | LINK ROAD | 8:50AM | 3:30PM |
| 4 | P I D C | LINK ROAD | 8:50AM | 3:30PM |
| 5 | GARDEN | LINK ROAD | 8:50AM | 3:30PM |
| 6 | NAZIMABAD | LINK ROAD | 8:50AM | 3:30PM |
| 7 | LIAQUATABAB | LINK ROAD | 8:50AM | 3:30PM |
| 8 | GULISTAN E JOHAR | LINK ROAD | 8:50AM | 3:30PM |
| 9 | BALDIA | LINK ROAD | 8:50AM | 3:30PM |

Example of Shuttle Services – Bus Timetable



Example of Outside the campus (within a city) Shuttle Services' Route Map

Zero Emission Vehicles (ZEV) Policy on Campus

Ziauddin University is keenly working to make its campus carbon free and environment friendly. Ziauddin University has not only designed **smart building infrastructure** but also **Pedestrian friendly campus** to promote walking trend and reduce carbon emission. The university has **multiple entrance points** to reach towards campus buildings. Students are not restricted to enter only from main gate instead they can enter directly to their perspective building gate. This favors students not to travel around the whole university to reach their destination building, they can directly get pick up and drop off to their building. University has a **vehicle-free path**, approx. travel distance is about **0.1 KM**. There is no such space for driving and parking inside the campus, that is why **inside the campus use of Electric Vans/ Vehicle is not practical or possible but still students can travel from their own bicycle or scotty which is available but not provided by the University.**





Example of Infrastructure is Pedestrian friendly with Multiple Entrances of buildings & Vehicle-free path with 0.1 KM distance so Electric Vans Use is not possible at our campus but bicycles are available

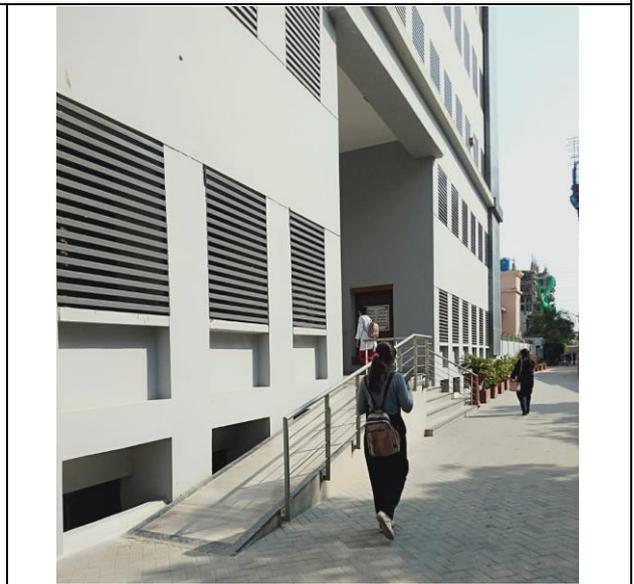
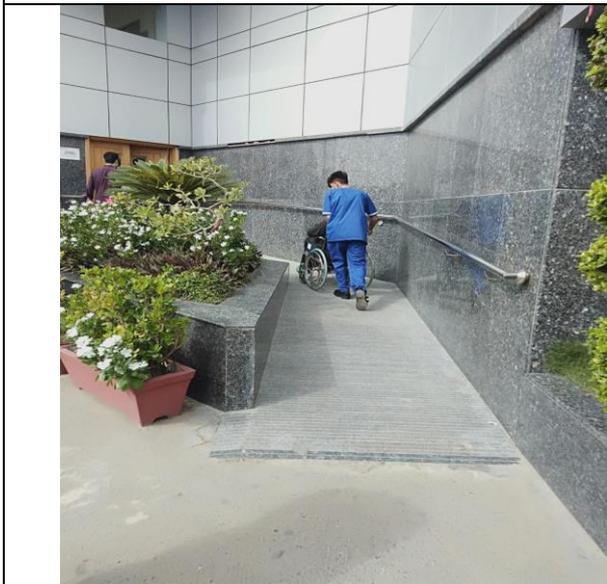
Pedestrian Path Policy on Campuses

Ziauddin University practicing the following policies for disabilities in their campuses or sites, which are as follows:

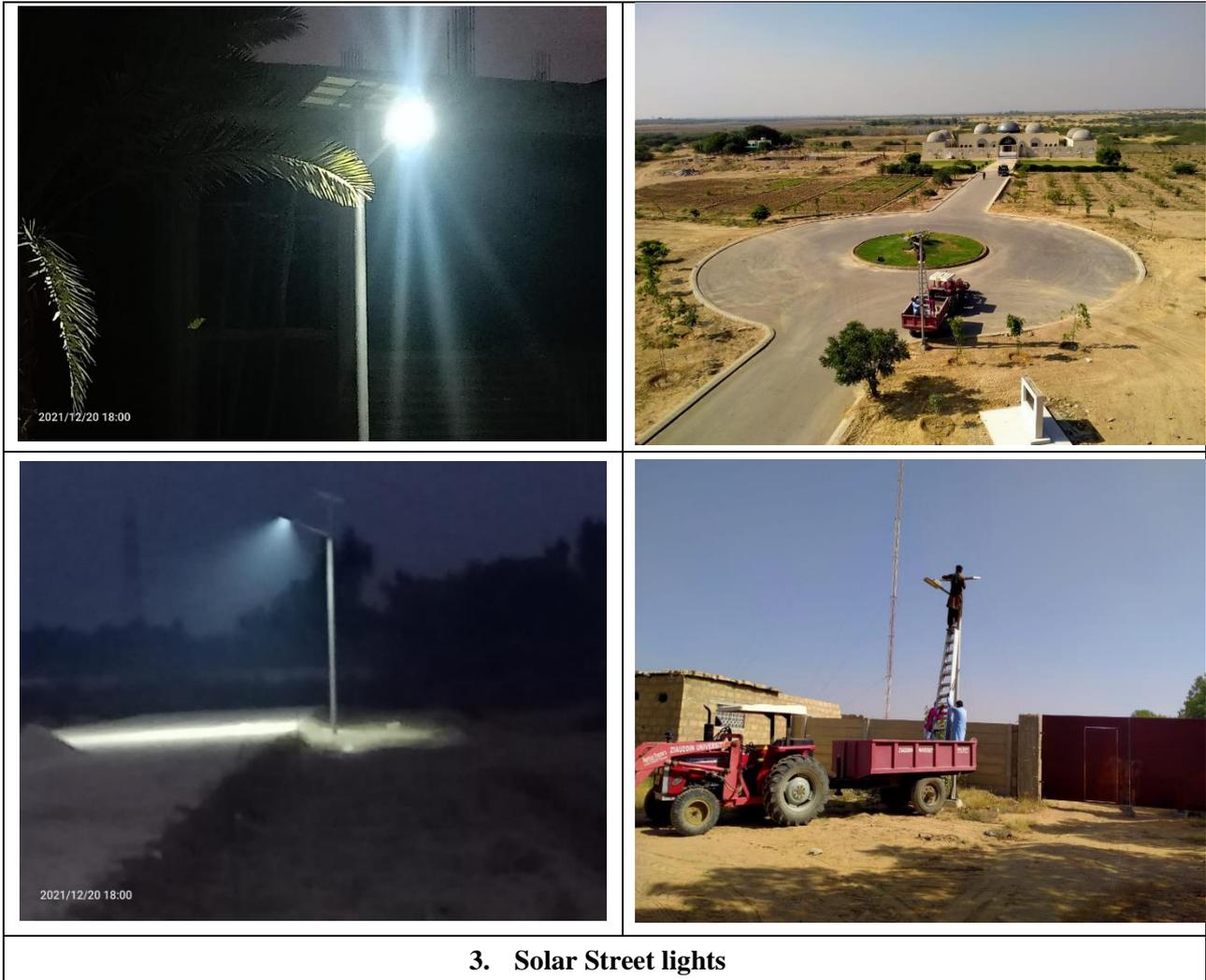
1. Separator between road for vehicle and pedestrian path.
2. Ramps and guiding blocks which have suitable design for pedestrians having physical disabilities.
3. There is as such no need of Street lamp for our students and staff because our campus timing is from 8:30 AM to 5:30 PM but we have installed solar street lights at our Link Road site and Sukkur Campus to serve the nearby locality and for future prediction that in case if we begin evening shift too.



1. Separator between road for vehicle and pedestrian path



2. Wheelchair Ramps for Physical Disabled



3. Solar Street lights

Program to limit or decrease the parking area on campus

Following are the initiatives taken by Ziauddin University to limit or decrease the parking area and carbon emission on campus, which are as follows:

1. Shuttle/bus one site to other site

Ziauddin University is operating shuttle services from different points to campus. The objectives of these free of cost shuttles are to encourage students and staff to travel by shuttle bus rather than individual vehicles which ultimately reduce the carbon emission and free the parking lot space from inside the campus.

These shuttles can accommodate approximately 1500+ students per trip which means an average **reduction of 300+ private vehicles**.

2. Rideshare (Carpool)

The carpooling system was initiated, in which 7-8 members in each car can commute to from their homes and University. All students are socially connected to WhatsApp groups. They can easily communicate to their classes and **multiple students of the same locality share rides**, which reduces emission and pollution. The carpooling system is economical and eco-friendly as rides and costs are shared with other members.

3. Private Vehicles are not allowed into the campus

Ziauddin University prefers walking friendly lifestyles therefore, ZU restricts the parking area to limit the private vehicles inside the campus. No students are allowed to park their car inside the campus. For inside parking, University's parking stickers are allocated to University's officials. Only University managed cars with stickers which are 44 only, are allowed to park inside the campus. Due to this action students prefer ride sharing instead of bring their own car, which directly diminishes the ratio of private cars inside the campus and its reduced carbon emission.

4. Limited parking zone

Ziauddin University limits the use of private vehicles by limiting the parking lot inside the campus. The parking space is already too limited that on an average only 200 small motor vehicles (motorcycles) can be parked at a time. This limited parking space enforces employees or students to share rides or use university shuttle service instead of individual vehicles.

5. Restricted Parking Time

Ziauddin University limits the use of private vehicles by restricting the time of bike parking inside the campus. ZU Security follows the SOPs to the locked parking lot at 9:30 A.M for bike parking. People have to park their motor vehicles on the streets at their own risk which is very risky. This action leads them to share rides or use shuttle service instead of individual vehicles, and promote sustainable transportation.

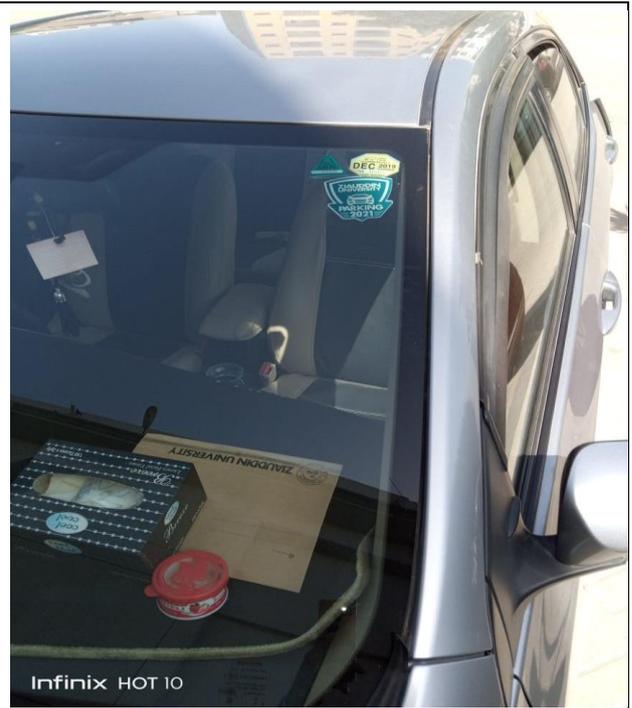
Collectively, all these programs resulted in more than 30% decrease in use of private vehicles, parking area reduction and carbon emission.



Shuttle Bus Service (Ziauddin University One Site to Other Site)



Rideshare (Carpool)



Private vehicles are not allowed into the campus, only higher Management's Vehicles with university's parking stickers are allowed



Limited parking zone



Restricted Parking Time

Transportation Initiatives to Decrease Private Vehicles on Campus

Ziauddin University took the Transportation Initiatives to Decrease Private Vehicles on Campus, which are as follows:

1. Shuttle/bus one site to other site

Ziauddin University is operating Shuttle outside the campus for daily commuting. Inside the campus we don't need any vehicle to commute as all our Sites are designed in a way which is Pedestrian Friendly. We have multiple entrance gates. Each building and each gate to their respective building is on Walking distance. We are providing shuttle service for daily commutes, due to which the ratio of students' private cars declined which reduced carbon emission.

2. Carpooling

The carpooling system was initiated. All students are socially connected to WhatsApp groups. They can easily communicate for their classes and merge **multiple students of the same locality in a car** which reduces air pollution and noise pollution. The carpooling system saves the economy of every person as they share their rides and also share the cost with the other member in the car. It will stop endless spending money on travel.

3. No Inside Parking Allowed to Students

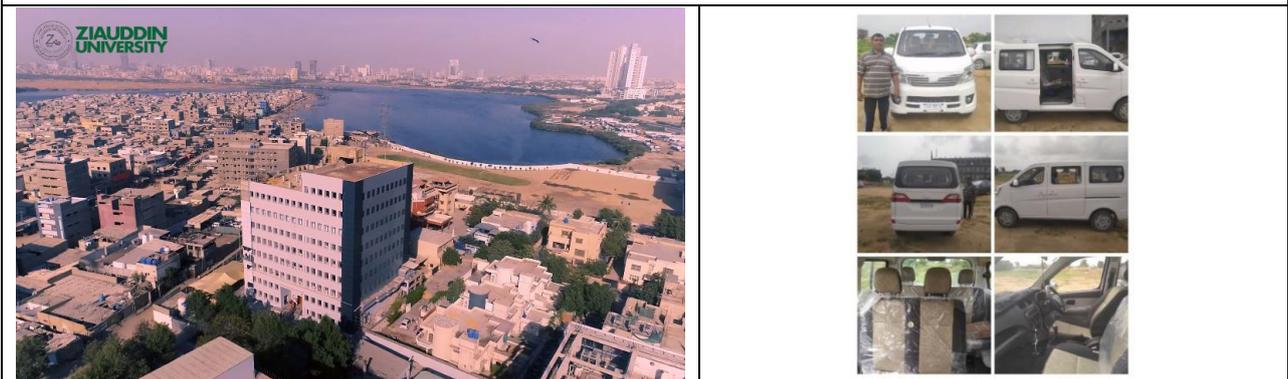
Moreover, no students are allowed to park their car inside the campus. For inside parking, University's parking stickers are allocated to University's officials. Only University managed cars with stickers are allowed inside the campus. Due to this action, students prefer ride-sharing instead of own car which directly diminishes the ratio of private cars inside the campus and its reduced air pollution.

4. Emission-Free Day

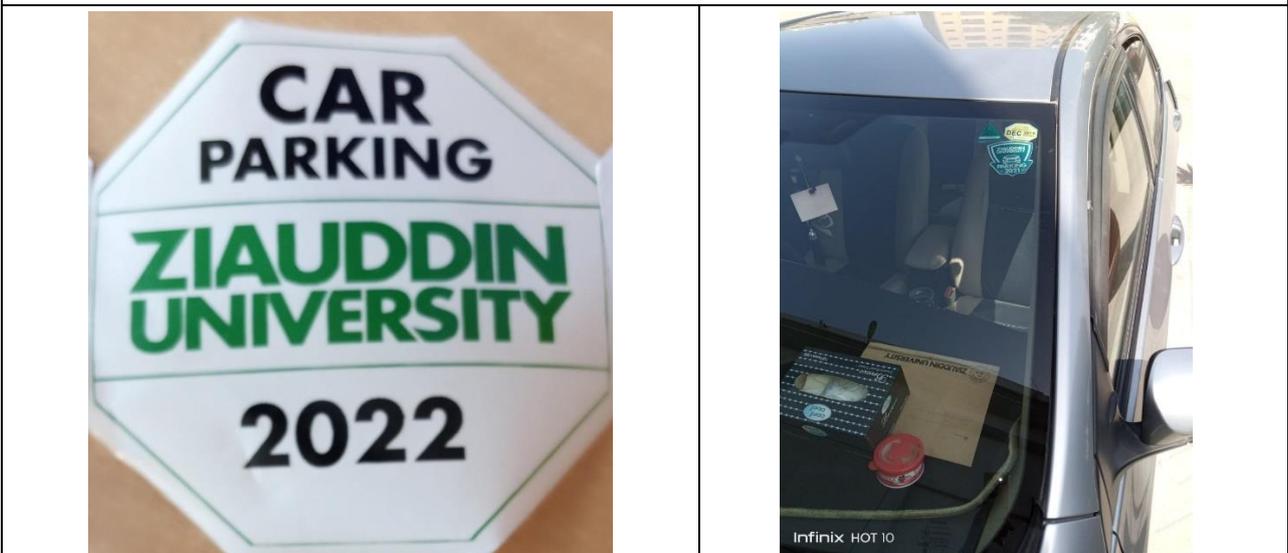
To encourage alternative transportation and create a healthy and sustainable environment, Ziauddin University has launched a cycling activity every once a week. In which nearby students and co-workers in the vicinity (1-2 Miles) of Ziauddin University Main Campus are encouraged to give up their cars for a day and commute to University on Bicycle. On that day bikers are allowed to choose their craziest biking outfit They are allowed to choose comfortable, coolest, colorful and safest outfit of their choice to wear and pose for good pictures. Through this activity ZU raises awareness of environmental pollution and helps to reduce emission.



Shuttle Bus Service (Ziauddin University One Site to Other Site)



Carpooling/ Sharing



Parking Stickers

Only Vehicles with official parking stickers are allowed

Example of No Inside Parking Allowed to Students



Emission-Free Day

Example of transport initiatives to decrease private vehicles by Ziauddin University

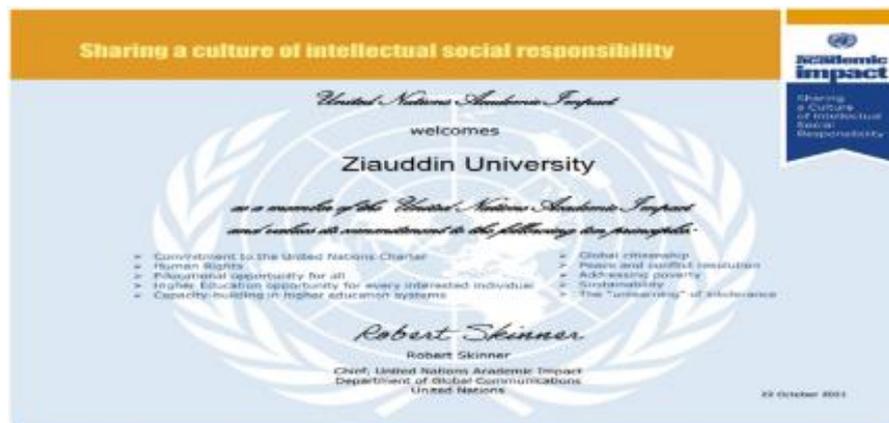
6. Education & Research (ER)

- The ratio of sustainability courses to total courses/subjects in 2022 is >20%
- Total research funds dedicated to sustainability research (in US Dollars) is an Average of \$ 230,307.30
- Total research funds (in US Dollars) (average per annum over the last 3 years) are \$ 526,609.31
- The ratio of sustainability research funding to total research funding is 43.7 %
- On Average of three years more than 30 Scholarly publications on sustainability published.
- University-run sustainability website is also available which is regulate and update regularly.
- Number of events related to sustainability. (Average annually for the past 3 years) are 18.

Student organizations related to sustainability

Ziauddin University offers sustainability in their entire activities. Currently, we have following organizations for students that embed sustainability. We are willing to pursue more organizations in the near future.

- **Membership with United Nations Academic Impact (UNAI)** to promote global priorities, including peace, human rights, and sustainable development
- Ziauddin University as a signatory of the Talloires Declaration-ULSF Association of UNIVERSITY LEADERS FOR A SUSTAINABLE FUTURE.



Sustainability related Events Organized for Students (2020-2022):



Marine Life exploration & Awareness Trip

On 4th December 2022, Trip to Charna Island for students to highlight marine life, their protection and awareness with fun filled water activities such as scuba diving, snorkeling, boating etc.



Plantation Drive

The Plantation Drive at the Clifton Urban Forest, Karachi, was organized on 21st August 2022. The aim of this event was to contribute towards the environment combating global warming.



Debating Championship on sustainability

This year Ziauddin University hosted the 13th edition of the Ziauddin University Debating Championship (ZUDC) which took place from 18-20 February 2022 at the Ziauddin University, Clifton campus. More than 90 debaters from 20 different teams, ranging from O-Level institutes to universities participated this year. Over the course of three days, students had the opportunity to showcase and refine their debating skills, forge friendships and compete for the esteemed ZUDC trophy.



Research Methodology Workshop

To support the growth of faculty with capacity building in research and enhanced productivity, the workshop on research methodology was organized from February 1-4 2022. The first two days of the workshop were dedicated to qualitative and quantitative research, literature search, scientific writing including synopsis. The Third day comprises sessions on research & innovation ecosystem, research for impact, linkages & outreach & grant writing. The day four comprises sessions on Endnote, statistical methods of Data Analysis and hands-on session on SPSS.



Youth Club Session on Best Version of Yourself

Ziauddin college of speech language and hearing sciences in collaboration with the youth club organized a session for all students and faculty of Ziauddin on the topic of being the best version of yourself. President of Youth club, Mr. Raja Zia ul Haq, came to give the talk. He gave multiple examples of not only himself of his journey but also examples of different Prophets and their journey and how a person can learn from such stories and waqia's from Quran and try to improve herself/himself.



Parental training Session on the topic of Early Intervention of Language Delay

On 19th February 2022, an interactive session highlighting the difference between language disorder and language delay, what are the red flags of language delay for parents to identify and start speech therapy as soon as possible. Also highlighting Covid and its effects on kids' language. Therapists also showed and told parents some activities that can be done with kids stimulating language.



Hands-on Training Workshop: Fiberoptic Endoscopic Evaluation of Swallowing (FEES)

ZCSLHS organized a hands-on training workshop on FEES. The five-day workshop was led by a team of SA Swallowing Services, which delivered training and clinical services using the FEES procedures. The workshop began on September 30 and ended on October 4 2022.

The training apprises the students with a technically feasible assessment, in case the patient is too sick to move, FEES eliminates the process of taking the patient down to Radiology.

Many locals from rural areas are unaware that speech and swallowing difficulty is an alarming situation, co-founder SASS Prof. Dr. John R. Ashford said, urging that the difficulties must be assessed at the earliest so it fixes the quality of life of those who are suffering.



Parental training Session on the topic of Early intervention of children with ASD

On 16th April 22, Ms. Asfia Naseem and Ms. Amna Bokhari shared their knowledge regarding how teamwork is important in assessing a child with ASD and the major players of this team are the parents and their observation regarding the child. A multidisciplinary team comes into action which has a psychologist, occupational therapist, Speech language therapist and at times neurologist. They all play a significant role in helping the child. The psychologist uses the DSM 5 to assess the child's behavior and see if he/she meets the criteria of ASD. Two important criteria when assessing the child is his lack of social interaction and repetitive behavior which are the major red flags. The therapists also discussed what are the important assessments done by speech language therapists to suspect ASD and for giving out appropriate referrals.



Seminar: Hear for Life, Listen with Care

On 3rd March 2022, Hybrid Seminar for students and professionals to raise awareness and importance of hearing, preservation of hearing loss, red flags of hearing loss

Celebrated International Disabled Day

On December 2022, Ziauddin College of Dentistry celebrated World Disabled Day and offered Free Dental Camps and awareness on Disabled rights and their role model stories to motivate people with physical disability.

ZIAUDDIN UNIVERSITY

COLLEGE OF SPEECH LANGUAGE & HEARING SCIENCES

ACELP IN COLLABORATION WITH COLLEGE OF SPEECH, LANGUAGE AND HEARING SCIENCES ZIAUDDIN UNIVERSITY OFFERING

DIPLOMA IN MULTI RE/HABILITATION OF CHILDREN WITH SPECIAL NEEDS

This program focuses on both the theoretical and practical aspects of special education thereby helping the course participants to obtain hands-on experience in working with students with special needs whilst the emphasis on Multi-Disciplinary approach.

Those who have a graduate degree OR Intermediate with experience of a rehabilitation school setting can apply. Parents of children with special needs, fulfilling the eligibility criteria may also join the program.

| | | |
|--|---|---|
| COURSE DURATION 36 WEEKS (66 HOURS) / WEEK WEEKENDS ONLY CARRIES | REGISTRATION OPENS ON 10 TH MAY 2022 | TOTAL FEE ONE TIME PAYMENT \$15,000 (INCLUDING REGISTRATION AND EXAMINATION FEES) |
|--|---|---|

RADIO SHOW

ZU FM 98.2

8TH JUNE 2022 AT 12PM

UNDERSTANDING APHASIA

SPEAKERS
MS. AMINA SIDDIQUI
MR. ALI PUNJANI

CONTACT: +92 21 35642979 | WWW.ZU.EDU.PK | INFO@ZU.EDU.PK

Diploma in Multi Rehabilitation of Children with Special Needs

Ziauddin University College of Speech Language & Hearing Sciences in collaboration with ACELP (Association for Children with Emotional & Learning Problems) offered 6 months diploma in Multi Re/Habilitation of Children with Special Needs. This program focuses on both theoretical and practical aspects of special education thereby helping the participants to obtain the hands-on experience in working with students with special needs whilst the emphasis on multi-disciplinary approach.

Radio Show on Understanding of APHASIA

June is celebrated as Aphasia awareness month. Aphasia is a condition that affects your ability to communicate. It can affect your speech, as well as the way you write and understand both spoken and written language. Aphasia typically occurs suddenly after a stroke or a head injury. ZU FM 98.2 facilitated College of speech language and hearing sciences project of increasing awareness of Aphasia by hosting a show on the importance of identifying aphasia as early as possible. Types and symptoms of aphasia were discussed in detail as well as the causes of aphasia. It was also discussed how aphasia is different from Alzheimer's and dementia.



ART 2022
6TH ANNUAL RESEARCH TALK
 (Physiology, Research & Sustainability)
 2nd November 2022

PROGRAM HIGHLIGHTS
 Faculty research display
 Masters' thesis display
 Thematic presentations by undergrads
 Prize for best poster in every category
 Research Talks by eminent scientists
 Intellectual networking
 Ideas for future research
 Participation certificates
 Separate certificate for poster presenters
 Abstract e-book

TO BE NOTED
 Abstracts should be submitted online at the given link:
<https://forms.gle/ryf53Y8fqSZUWk/89>
 Registrations are invited on the given link:
<https://forms.gle/Cs8SRWbXDza7A8BR8>
 Abstract Submission Deadline: **25th Oct 2022**
 For queries: physio.events@uok.edu.pk
 Or visit Program secretariat, Ground Floor, Dept of Physiology, UoK

Organized by
 DEPARTMENT OF PHYSIOLOGY
 UNIVERSITY OF KARACHI



Won Best Poster Award for Research in Karachi University

The 6th Annual Research Talk 2022 (ART) was organized by the Department of Physiology at the University of Karachi on November 2, 2022. The ART program is very flexible and incorporates a variety of recent research findings that are presented to students by famous scholars, with a focus on the most prevalent health problems in our area and effective local remedies, such as preventions or measures.

Ms. Abeer Sajid, Senior Lecturer ZUFONAM, received the Best Poster Award for her research, "Protective potency of Moringa oleifera seed oil on Hepatic antioxidant status in Alloxan induced Diabetic rats."

Bioethics Workshop On Privacy And Confidentiality

The Indus Hospital & Health Network (IHHN'S) organized the sixth biennial ICON event held on January 20-23, 2022. ICON 2022 is the Indus Hospital & Health Network's signature conference. ICON's purpose is to facilitate communication across researchers, health professionals, and policymakers. It is aimed at promoting education, research, and training to ensure sustainable capacity in health services.

Dr. Sumaira K. Punjwani, Associate Professor of Ziauddin University Faculty of Nursing and Midwifery (ZUFONAM) facilitated "Pre-Conference Bioethics workshop on Privacy & Confidentiality"



Blended Learning Seminar

A Student-Led Seminar upon blended learning was conducted at ZUFONAM on Thursday, 17th March 2022. The purpose of this seminar is to give awareness regarding Blended learning. Blended learning is the combination of online learning with face-to-face learning. It has been used widely since the outbreak of COVID-19. In the seminar, various models of Blended Learning were explained which include the face-to-face driver model, enriched virtual model, rotation models, flex model, flipped model, project-based learning, and gamification. Participants actively participated in the seminar and shared their thoughts about the advantages and challenges of Blended Learning. They are multiple benefits of Blended Learning; some of them are time-effective cost-saving, and engagement. They said that the challenges associated with Blended Learning are; access to the internet, lack of resources, and electricity access. The participants and faculty members shared their views after the seminar and appreciated the efforts.

Science Olympiad 2022

ZUFONAM celebrated Science Olympiad on October 7th, 2022 at Ziauddin University Faculty of Nursing and Midwifery. Subjects like Applied Nutrition is a basic course offered in BSN I that deals with the relationships between nutrition and the well-being of the general population of all ages. As part of an applied nutrition assignment, students of BScN I were divided into groups and given a variety of disorders of organs such as the liver, heart, kidneys, etc. in which they talked about their respective topics and the appropriate nutrition that should be given in such conditions. The way students presented their models and presentations astounded the faculty members and appreciated all the students for their hard work.



Second Line Master Training Workshop on Certificate Course for Nursing Educators

The Sindh Health Department and the World Health Organization (WHO) has organized a second line master trainer Training Workshop on Certificate Course for Nursing Educators in Karachi from May 24 to May 31, 2022. The goal of organizing this workshop was to help faculty members in Sindh enhance their capacity building and assists nursing educators in gaining a better understanding of modern nursing education. In this regard, faculties from various schools of nursing are invited to deliver lectures, interactive sessions, and group discussions. Dr. Yasmeen Amarsi and Dr. Sumaira K. Punjwani from Ziauddin University Faculty of Nursing and Midwifery also facilitated the Second Line Training session.



Session & Seminar on Sustainable Development Goals (SDGs)

Ziauddin University, Faculty of Nursing and Midwifery Community Stream organized Two-day activity on 'Sustainable Development Goals (SDGs)' on July 4th-5th, 2022 for students of BSN I and IV years who are future nurses. On the first day, Dr. Atif Anjum and Madam Farhana briefed students about the background and significance of SDGs. On the second day, Madam Farhana and Major Sadia Kanwal taught students about SDGs and gave them new ideas about what would they need to do and how would they work in the community. In this 2nd-day seminar, 210 participants including the faculty members and students attended the session. All participants made us proud and committed that they will work hard to achieve SDGs.



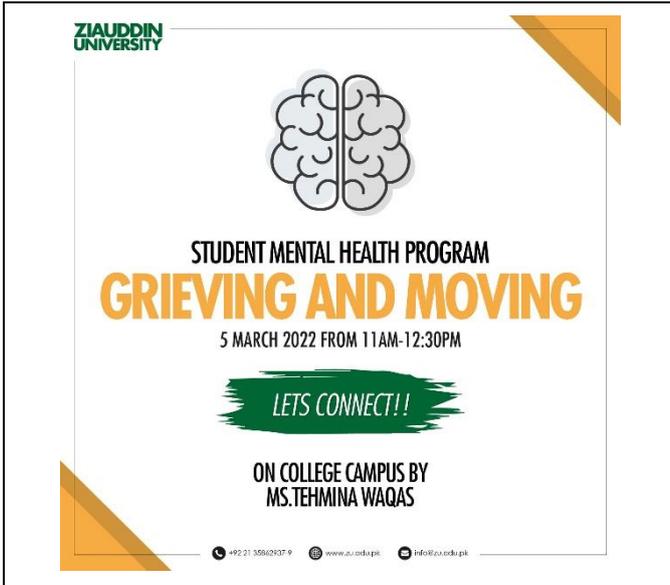
Exhibition & Poster Competition 2022

The 1st Eastern Medicine Exhibition and Poster Competition 2022 organized by College of Eastern Medicine, Faculty of Eastern Medicine and Natural Sciences was held on Wednesday October 12, 2022. Projects and posters (27) were presented by BEMS students from 1st to 4th year. Faculty members from different department of the University. Students from different department of the University. The overall idea was to promote project-based learning as an effective tool for students.



Poster Competition on World Food Day

Department of Human Nutrition celebrated World Food Day, which focused on the theme given by FAO for the year "Our actions are our future- Better production, better nutrition, a better environment and a better life". The main objective was to enhance the importance of food & its health outcomes and to polish students' poster making skills apart from theoretical knowledge, thus this activity was correlated with their academic performance to ensure active participation.



Session: “Grieving and Moving” a Mental Health Program for student & their families

College of Speech Language & Hearing Sciences, Ziauddin University organized first session of Student Mental health awareness on 5th March’22. The first session is on “Grieving and moving on” by Ms. Tehmina Waqas and is open for not only for students but also for Students families and extended families.

Participation in Research & Technology Expo

Highlights from 1st research and technology showcase organized by NEDUET and Sindh HEC it is being held at the expo centre on 19th and 20th May 2022. Data Acquisition, Processing and Predictive Analytics Lab (NCBC), Ziauddin University presented their Projects at the event.



Workshop on Challenges of Teaching Gen-Z Students: A Multidisciplinary Perspective

The Faculty of Nursing & Midwifery, Ziauddin University organized a workshop on the "Challenges of Teaching Gen-Z Students: A Multidisciplinary Perspective" to foster an environment that promotes inter-college and inter-faculty multidisciplinary interactions.

Mass Planting Campaign-ZU Sukkur Campus

On November 24, 2022, Dr. Ammad Hussain, Chief Executive of Dr. Ziauddin Hospital visited the Ziauddin University - Sukkur Campus. During the meet and greet session, Dr. Ammad appreciated the efforts of the faculty of ZCRS and also planted a Plumeria Obtusa plant in continuance of the Mass Planting Campaign to promote the idea of Clean Green Pakistan.



Multidisciplinary Panel Discussion On "Gender Diversity; Awareness in Youth"

The department of Family Medicine in collaboration with the Department of Continuing Professional Education organized a multidisciplinary panel discussion on "Gender Diversity; Awareness in Youth" on 13th December 2022. In the thought-provoking meeting, various panelists from different specialties gave their insights on Gender Incongruence and Gender Dysphoria.



Workshop: Scientific Paper Writing & Grant Applications

On April 2022, Ziauddin University held a workshop in collaboration with Pakistan Association of Medical Editors (PAME) on "Scientific Paper Writing & Grant Applications"



Mental Health Week (Free Psychological Screening Camp, Walked & Workshop)

College of Clinical Psychology inaugurates Mental Health Awareness Week at Ziauddin University from 26th - 28th October 2022. Always at the forefront of celebrating differences, raising awareness and being fearless advocates, the faculty, staff and students walked to support mental health followed by a free psychological screening, organized workshop in collaboration with Parvarish Recovery Centre (PRC) on topic "Mental Health for all a Global Priority". In this talk conversation about mental health importance and its impact on community.



Global Conversation on "Women As Catalyst Resilience, Diversity & Change"

To mark International Women's Day, ZU in collaboration with Global Thinkers Forum hosted the 4th Athena40 Global conversation on March 8, 2022. Deputy Head of Mission, Mr. Martin Dawson (British Deputy High Commission Karachi.), Dr. Masuma Hassan (Chairperson of Pakistan Institute of International Affairs), Ms. Tasneem Ahmar (Executive Director UKS Research centre), Ms. Sarah Qureshi (CEO Aero Engine Craft), and Mr. Syed Muaz Shah (Director Centre for Human Rights at Ziauddin University) highlighted their views on gender equality & female leadership.



11th Interactive Series of ZU Dialogues on “Cybercrime: A Digital Threat”



Poster Competition on theme: Youth Voices to Save the Planet



ZU Dialogues on Global Warming: Climate Change to Climate Crisis



Collaboration of ZU with United Nations Academic Impacts UNAI for developing a sustainable society

KINNAIRD COLLEGE FOR WOMEN LAHORE, PAKISTAN
OFFICE OF RESEARCH INNOVATION AND COMMERCIALIZATION
IN COLLABORATION WITH
DEPARTMENT OF ENVIRONMENTAL SCIENCES

PRESENTS

PRE COP-26 CLIMATE CHANGE WEBINAR

OCTOBER 6th, 2021

FEATURED PANELISTS



Prof. Patrick Bond
Title: Can the COP26 in Glasgow deliver climate justice?



Engr. Faria Uqaili
Title: Water and the global climate crisis



Dr Rabia Zafar
Title: Climate change and the need of Adaptation Communication in Pakistan



Dr. Zulfiqar Ali Usmani
Title: Sustainable Development: Climate Change and Energy Transition

Program

Opening
10:00 am
Welcome note by Principal, Prof Dr Rukhsana David
10:10 am – 10:20 am
Keynote talks by panelists
10:20 am – 12:00 noon
Q/A Session followed by Panel Discussion titled "Development and Adaptation to climate change in developing countries"
12:00 noon - 12:40 pm
Remarks by UN Representative
12:40 pm -12:45 pm
Remarks by Vice Principal, Kinnaird College
12:45 pm - 12: 55 pm
Closing
12:55 pm - 1:10 pm

<http://oric.kinnaird.edu.pk/>
 Email: director_research@kinnaird.edu.pk; oric@kinnaird.edu.pk
 Tel: 04299203781-3 (ext 265)

5th Karachi International Water Conference Webinar Series Climate Change and Pandemic: Impact on Water

Webinar 1
Code Red for Humanity: Climate Action Now

Wednesday, 17th November
4:00 to 6:00 pm PST

Hisaar Foundation
engro foundation

Experts will debate and discuss the impacts of unprecedented climate change and possible impacts of mitigation and adaptation measures to cope with anthropogenic climate change

SPEAKERS



Dr. Adil Najam
Dean
Frederick S. Pardee
School of Global
Studies, Boston
University



Dr. Patrick Bond
Professor
University of the
Western Cape School of
Government,
Cape Town, South Africa



Roberta Inniss
Senior Adviser
Ministry of Climate
Change, Italy



Dr. Aditi Mukherji
Principal Researcher
IWM, New Delhi



Sini Kamal
Chairperson,
Hisaar Foundation



Rafay Alam
Environmental
lawyer and activist
Soleem, Alam & Co



Mahmood Nawaz Shah
Senior Vice President
Sindh Abadgar Board



Arwa Marient
Strategy Adviser
EU China, Environmental
Cooperation

MODERATOR



Dr. Zulfiqar Ali Umrani
Director ORC,
Sustainability Office,
Ziauddin University

#HF #SKIWC
waterconf2021.hisaar.org
/HisaarFoundation
/HisaarF

Zoom ID: 81116688761
Passcode: 182019



ZU Director Sustainable Office Zulfiqar Umrani has presented a **Webinar on: "Climate Change & Energy Transition"**

Director Sustainable Office ZU has moderated a **Webinar on: "Climate Change & Pandemic: Impact on Water"**

ICSD International Conference on Sustainable Development

SDG6 Implementation in LMICs and How National Water Policies Can Accelerate Progress

6 CLEAN WATER AND SANITATION

Subject: Approval of Research Study by BASR

Dear Engr. Umair Jilani,

This is to inform you that 289th meeting of Board of Advanced Studies and Research (BASR) of Ziauddin University has approved your PhD synopsis in Electrical Engineering, titled, "Urban Traffic State Estimation and congestion prediction by using Generative Adversarial Networks". Your supervisor is Prof. Dr. Engr. Muhammad Asif and co-supervisor is Prof. Dr. Engr. Munaf Rashid.

Your project was also approved by 303rd Academic Council meeting.


 Prof. Dr. Saeeda Baig
 (Secretary BASR)

ZU in partnership with University of Bristol Alumni on International Conference on **"How National Water Policies Can Accelerate Progress"**

Research Proposal Present on **"Urban Traffic State Estimation & Congestion prediction by using Generative Adversarial Networks"**

ZIAUDDIN UNIVERSITY

9TH ANNUAL INTERNATIONAL CONFERENCE ON SUSTAINABLE DEVELOPMENT (ICSD)

**RESEARCH FOR IMPACT:
AN INCLUSIVE AND SUSTAINABLE PLANET**

20-21 SEPTEMBER 2021

JOIN US ON [icsd.org/events/icsd-2021](https://www.icsd.org/events/icsd-2021)

PLENARY SPEAKERS

H.E. SHEIKH HASINA
PRIME MINISTER OF BANGLADESH

H. E. MIA MOTLEY
PRIME MINISTER OF BARBADOS

DR. RAJ SHAH
PRESIDENT, THE ROCKEFELLER FOUNDATION

LAURA COZZI
CHIEF ENERGY MODELLER,
INTERNATIONAL ENERGY AGENCY

KRISTALINA GEORGIEVA
MANAGING DIRECTOR,
INTERNATIONAL MONETARY FUND

PROF. JEFFREY SACHS
PRESIDENT, SOSN

PARALLEL SESSION

SDG LEARNINGS FROM COVID-19 FOR SCIENCE-INFORMED DECISION-MAKING
20 SEPTEMBER, 2021 | 9-11 AM

INVITED SPEAKER & MODERATORS

DR. NIDA HUSSAIN
PRO-CHANCELLOR,
ZIAUDDIN UNIVERSITY

DR. ZULFIQAR ALI UMRANI
DIRECTOR ORIC,
ZIAUDDIN UNIVERSITY

Contact: oric@zu.edu.pk | Ext:2359

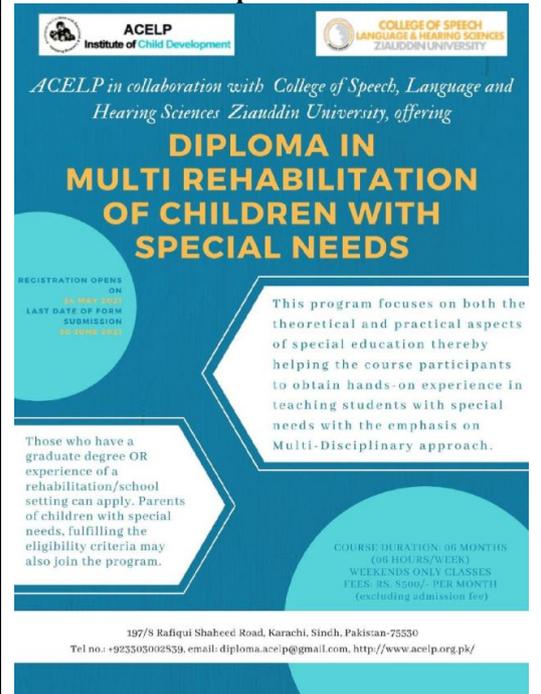
+92 21 35862937-9 www.zu.edu.pk info@zu.edu.pk

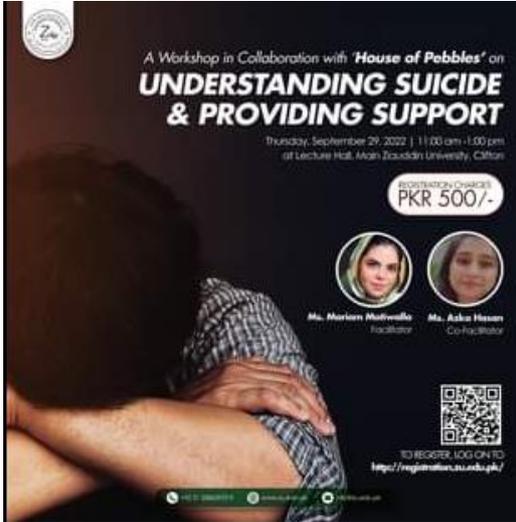
9th International Conference on Sustainable Development (ICSD): “An Inclusive & Sustainable Planet”

Example of Sustainability activities organized in the Ziauddin University

Activities Organized by students Societies Related to Sustainability in the year 2022:

| S. No. | Student Organization | Activities/ Events related to sustainability | Description |
|--------|----------------------|--|---|
| 1. | | <p style="text-align: center;">Annual Bake Sale</p> | <p>The annual Bake Sale conducted by Welfare AID with support of the Office of Student Affairs of Ziauddin University was held on the 7th of September!</p> <p>The event was a sweeping success with 20 vendors selling their wares from 9:30 in the morning to 3:30 in the afternoon!</p> <p>Students and faculty alike swarmed in and out of the scene in droves to either snack on the shawarmas and noodles, to then throw sponges and paint on their friends, to then finally ride the wild pirate ship.</p> |

| | | | |
|-----------|---|---|---|
| <p>2.</p> |  | <p style="text-align: center;">Bikeathon</p>  | <p>Bikeathon is an annual fundraising event whereby funds are raised to provide medical assistance to the underprivileged. Like every year, the Office of Student Affairs organized a Bikeathon in collaboration with 'Welfare Aid'. An annual project, where students of Ziauddin University get to participate in a bike rally. This year, the event took place on February 26, 2022. Students gathered at Ziauddin University Clifton Campus to collect their bikes and participation bands.</p> |
| <p>3.</p> |  | <p style="text-align: center;">Career Counseling Seminar</p>   | <p>Global Undergraduate Exchange Program Guidance was held on 12th and 13th September 2022 subsequently at the North and Link Road campuses respectively. The sessions were organized by the student council ZUFESTM and IEEE members. The speaker, Miss Myra Aslam Qureshi student of BS Biomedical Engineering, currently, in semester 6, inspired many students from semesters 1-6 to take part in the GLOBAL UNDERGRADUATE EXCHANGE (UGRAD) program in Pakistan which is administered by the United States Educational Foundation in Pakistan (USEFP). The Global UGRAD-Pakistan program offers cultural and academic exchange through a non-degree program for a semester at a university in the U.S.</p> <p>https://zu.edu.pk/office-of-student-affairs/</p> |
| <p>4.</p> |  | <p style="text-align: center;">Diploma in Multi Rehabilitation of Children with Special Needs</p>  | <p>Ziauddin University College of Speech Language & Hearing Sciences in collaboration with ACELP (Association for Children with Emotional & Learning Problems) offered a 6 months diploma in Multi Re/Habilitation of Children with Special Needs. This program focuses on both theoretical and practical aspects of special education thereby helping the course participants to obtain hands-on experience in teaching students with special needs with the emphasis on Multi-Disciplinary approach.</p> <p>https://zcslhs.zu.edu.pk/news-events/speech-diploma-in-multi-rehabilitation-may-2022/</p> |

| | | | |
|-----------|--|--|---|
| <p>5.</p> |  <p>PAKISTAN LIFE SAVERS PROGRAMME Join hands, save lives</p> | <p style="text-align: center;">Hands-on Master Training on Cardiopulmonary Resuscitation (CPR)</p>  | <p>Ziauddin University Faculty of Nursing & Midwifery collaborated with Pakistan Life Savers Program (PLSP) to organize two days' workshop consisting of four sessions on June 21st and 23rd, 2022, to give Hands-on Master training on Cardiopulmonary resuscitation (CPR). This workshop was organized for students, non-science faculty members, and administrative staff members of ZUFONAM.</p> <p>PLSP team leads the sessions highlighting the importance of CPR as a life-saving measure for the victims of cardiac arrest, its scope, and its limitations. This was followed by the demonstration of steps of adult CPR, Child CPR, and infant CPR including the management of choking in the case of adults, children, and infants.</p> <p>The main objective of the workshop is to make students, faculty members, and staff members into empowered individuals with the fundamental life-saving knowledge and skills of CPR and bleeding management needed to save lives.</p> |
| <p>6.</p> |  <p>HOUSE OF PEBBLES</p> | <p style="text-align: center;">Collaboration of ZU & House of Pebbles and Workshop on “Understanding Suicide & Providing Support”</p>  | <p>Department of Clinical Psychology, Ziauddin University, signed an MOU with the organization “House of Pebbles”. With this partnership our mutual goal is to enrich and equip the students of the clinical psychology department with a clinical skill mentoring and professional development program, along with increased engagement towards the sustainability, environment and community.</p> <p>Suicide is often considered a taboo topic but one conversation can change someone's life. College of Clinical Psychology, Ziauddin University collaborated with the House of Pebbles to conduct a workshop on Understanding Suicide and Providing Support on 29th September'22 in the lecture Hall Ziauddin University Clifton.</p> <p>https://m.facebook.com/zuedu/photos/a.500723526633279/5512643068774608/?type=3&source=57&paipv=0&eav=AFZQ8FyaiXQp2ykBVQNmqzOE3t_0cc1rQlqF0FOCZPNev6skjV9BcqV8ysSLJQv29Y</p> |
| <p>7.</p> |  <p>PRC</p> | <p style="text-align: center;">Collaboration of ZU & PRC</p> | <p>Department of Clinical Psychology, Ziauddin University, signed an MOU with an organization "Parvarish Recovery Center (PRC)". Parvarish Recovery Center is an in-patient treatment facility for individuals who live with substance abuse and behavioral disorders. They are given treatment in a safe, healthy and peaceful environment that is beneficial for their mental well-being and sobriety.</p> |

| | | |
|-----------|--|--|
| |  | <p>The students of the Clinical Psychology department will benefit from this collaboration between the two organizations since they will have excellent options for internships and volunteering activities for sustainable environment and wellbeing that will give them extensive and relevant experience in the field</p> <p>https://m.facebook.com/story.php?story_fbid=pfbid032H4DDrQAAAtyMu17Rp5SokpgkifPaBwwdaMXEyu1AST8yNsdsvZn9h1J621Zx2gB51&id=492207314151567&sfnsn=scwspwa&mibextid=WiMSqg</p> |
| <p>8.</p> | <p style="text-align: center;">Collaboration of ZU & KVTC</p>   | <p>Department of Clinical Psychology, Ziauddin University is pleased to announce its third MOU signing with the "Karachi Vocational Training Center (KVTC)", a collaborative effort towards "Enabling differently-abled".</p> <p>Karachi Vocational Training Centre is certified by the Pakistan Centre of Philanthropy (PCP) as a free-of-cost vocational rehabilitation center for intellectually challenged individuals. The rehabilitation at KVTC is a unique amalgam of Functional Academics, Vocational Skills Training, Sports Programme, and all Therapies. It emphasizes capacity development via vocational training (STEVTA Certified) which ultimately gives these beneficiaries employment opportunities.</p> <p>The collaboration between the two organizations will give the students of the Department of Clinical Psychology more opportunities for internships and volunteering activities for sustainable environment and wellbeing and in-depth experience in their field.</p> <p>https://m.facebook.com/story.php?story_fbid=pfbid032H4DDrQAAAtyMu17Rp5SokpgkifPaBwwdaMXEyu1AST8yNsdsvZn9h1J621Zx2gB51&id=492207314151567&sfnsn=scwspwa&mibextid=WiMSqg</p> |
| <p>9.</p> | <p style="text-align: center;">Collaboration of ZU & IHRI</p>   | <p>Department of Clinical Psychology, Ziauddin University, signed MoU with the Institution of Holistic Rehabilitation and Inclusion (IHRI). The collaboration aims to provide student opportunities for clinical exposure and educational activities.</p> <p>https://m.facebook.com/story.php?story_fbid=pfbid0dCMqi1q3VJPnWU1toWXdaicaj5AajQhnfA3Rn7if2xx6NnBtkcJmr6BjoTRi26ffl&id=492207314151567&eav=AFZ9Ccd0lUFuo1PIsy02X1rH6j3aD4U6h_9G64HI_deH0p-rGDHF8-iBWwd4R_gYAy0&paipv=0</p> |

| | | | |
|--|---|---|--|
| <p>10</p> | | <p style="text-align: center;">Plantation Drive</p>  | <p>The Plantation Drive at the Clifton Urban Forest, Karachi, was organized by the Student Council MBBS on Sunday, 21st August, 2022. The aim of this event was to contribute towards our country by planting trees and making the climate greener.</p> <p>The guide started by giving a speech about the forest and then took the volunteers to visit and explore the entire plantation site. He showed them different things in nature such as different plants like basal and water lilies, different animals and birds etc. and explained to them the concept of forest pathing.</p> <p>After giving them a detailed and informative tour, the guide took the volunteers to the actual plantation site where they had to plant the seedlings. Each individual had to plant 6 saplings. The holes were already dug and prepared for the volunteers to plant the saplings. The volunteers used water cans and shovels to help them plant properly. Care had to be taken to ensure that the holes were filled with good, nutritious soil, and that the saplings were planted erect. After planting, the volunteers watered the plants as well. They also saw a water reservoir which was very pretty and enhanced the beauty of the site.</p> |
| <p>11</p> |  | <p style="text-align: center;">Blood Drive</p>  | <p>The Ziauddin University' student society Welfare Aid organized the blood drive in collaboration with Dr. Ziauddin Hospital took place on June 23, 2022.</p> <p>The facility provided by Dr. Ziauddin Hospital was well-equipped. The turnover of blood donors made this a successful event. Dr. Ziauddin Hospital provided skilled technicians who handled everything in an efficient manner.</p> <p>There were more than 70 people who came to donate blood but around 40+ were allowed to donate. The students, staff and faculty showed a keen interest in donating blood.</p> <p>Link: https://zu.edu.pk/zu-events/</p> |
| <p>12</p> |  | <p style="text-align: center;">Flood Relief Camp</p>  | <p>On 11 September 22' and 18th September 22', Student council CCA community services wing organized a flood relief camp at a Government School in Gulshan iqbal. Donations were collected from students of Ziauddin University. Keeping in mind that the displaced victims included adults, children and pregnant women, these donations were utilized to purchase daily necessities like porridge, hygiene products, sheets, medications, clothes, packaged food, diapers, detergent, soap, feeding bottles and infant feeding formula. Products were further divided into packages in accordance with different gender/age groups and their specific requirements</p> |
| <p>Examples of activities organized in the Ziauddin University by student organizations related to sustainability</p> | | | |

Cultural Activities on Campus

Ziauddin University values culture of Pakistan and to inculcate the sense of ownership about culture among students ZU organizes several **Cultural activities on campus**. Each year about **more than 15 events** are organized which include Independence Day and provisional days celebrations, historical trips, Culture Exhibitions, Basant, Sports Championships, Sports week of each college & faculty and folk music Nights etc. This Year ZU participated in many Sports leagues of other Universities and HEC tournaments and as well as ZU Internal leagues are also arranged for indoor and outdoor sports activities for all. Total No. of ZU cultural events this year are about **24 Events in 2022**.

1. Ziauddin University Sports Activities that highlights our sports culture



ZU Boys & Girls Badminton Tournament

ZU organized badminton tournament on 14th & 15th November 2022 at Sindh sports board.



HEC Zone L Championship

On 28th November 2022, the ZU football team persevered and reached the finals of the HEC ZONE L championship.



Annual Sports Buzz

Ziauddin University organized indoor and outdoor sports buzz for College of Medical Technology on 10th, 11th and 12th of September 2022.



ZCRS Sports Fest

A 3-day Sports Feast arranged for Ziauddin College of Rehabilitation Science students from 27th August to 29th August 2022.

Numerous recreational and athletic activities were arranged, through all three days.



Tennis Court Inauguration Ceremony

The Inauguration of two newly built Synthetic Tennis courts at the Ziauddin University Clifton was held on 18 & 19 April 2022.



ZU Azadi Soccer Championship

On 14th August 2022, the Sports Division – Office of student affairs arranged a soccer championship to make the 75th Independence Day.



ZU Intercollegiate Basketball Championship

The intercollegiate basketball championship was held on 19th July 2022 at the ZU Basketball court.



The Girls Throwball Championship

The intercollegiate Throwball Championship was held on June 30 2022 at the Family Park, Ziauddin University.



Dr. Aijaz Fatima Futsal Championship

Dr. Aijaz Fatima Futsal Championship was held on 12 and 13 March 2022, at the Ziauddin University Sports Ground. Teams from the different universities participated in the tournament



Kamyab Jawan Program

The Athletes of Ziauddin University participated at the Kamyab Jawan Athletes which were held at Jinnah Ground Islamabad. Though they were not able to get the place on the winning stand but the participants performed at their best



ZU wins HEC Zone G Football Championship

Ziauddin University participated in the HEC Zone G Football Championship. The best universities from the city participated in the event and Ziauddin University football team showcased their excellent performance beating Hamdard University in series and played the final against one of the best football team of the league IOBM. Following this Ziauddin University got the opportunity to play at National level at Rahim Yar Khan.



HEC Men Basketball

The HEC Men's Basketball Tournament was held at PAF KIET Karachi. Teams from Ziauddin University, IoBM, Indus University, IBA, PAF KIET, NED University and Karachi University were invited to participate at the event which was held on 5th January, 2022. Ziauddin University won the quarter-final against IoBM.

2. Entertainment activities to highlights different cultures at Ziauddin University



Movie Night

A Movie Night for the Ziauddin Dental College on 14th October 2022. It was a fun-filled event with movies, music and lots of food options.



Movie Night: The Curtain Call 22

A Movie Night for the ZU College of Rehabilitation Sciences on Nov 18th 2022, the ambiance was created as per the theme; a mini haunted house was built with miniature creepy stuff all around the lobby to petrify the crowd.



Bonfire Night

A Bonfire event for the students of Ziauddin University on 18th Feb 2022, drawing approximately 300 students to the event. The event began with a rap performance, folk music & cultural food.



Character Day celebrated on THALF week

THALF was celebrated by medical students on completing 2.5 years from 13th to 17th June 2022 in which various professional characters or different cultures were adopted by students.



Professional Character Day

On July 14, 2022, Thursday, the ZUFONAM Student council decided to dress up. Indeed, the students dressed in their favorite profession's Character. We witnessed a range of topics, including culture, horror, the historic age, superheroes, favorite profession and some villains since they chose the themes for their characters.

3. Trips & Visits to highlights cultural activities



The Beach Bash 3.0

On 15th November 2022, Picnic at Turtle Beach for Medical Technology students. Events include nature view with live concert by Vasil – the band, folk songs, cultural dance, desi meal, horse and camel rides at seashore all these activities were value adding our cultural activities.

Peechay Hutt

The beach party took place on 3rd September, 2022 for MBBS students. Events pop up with DJ setup, cultural music & dance, cultural food & refreshments stalls, rung party, nature view from top to the adorable sandy water front and much more.



Beyond the Sea (BTS)

Basant, Rang Party, folk songs, cultural dance and various food and other cultural activities were arranged at sea side for students.

4. Celebrations at Ziauddin University that highlights our culture



75th Independence Day Celebration

On 14th August 2022, 75th Independence Day celebrations were held with zeal and enthusiasm. National songs competition, short speeches were held and cake cutting was held with the prayers that soon Pakistan may regain her economic and political stability.



ZU Baithak

After exams a successful get-together of students with Desi Theme “ZU Baithak” was organized. An event that would based on our Pakistani culture with old traditional music, a desi-white theme shalwar kurta dress code, traditional decoration, meal and various other attractions.



Culture Day

ZUFONAM BSN III Students celebrated Culture Day on September 30th, 2022 at Ziauddin University Faculty of Nursing and Midwifery. As it was a graded assignment, 150 students of BSN III took part and presented their assigned culture in which they highlighted various health, educational and social issues. Also, they displayed different handicrafts and famous foods of national cultures.



5. Food Culture in Different Ethnicities of Pakistan



Variations of Flavor Profile in Different Ethnicities of Pakistan

During the month of March, the Department of Human Nutrition & Dietetics celebrated March Nutrition Month. On 28th March 2022, food displays were presented by the students of BS-HND on the topic “Variations of Flavor Profile in Different Ethnicities of Pakistan”. The main objective was to showcase the variations of cuisines in different ethnicities of Pakistan and to polish students’ cooking and presentation skills apart from theoretical knowledge

Examples of Cultural Activities on campus Ziauddin University

Ziauddin University Sustainability Programs with International Collaborations in 2022:



Hands-on Training Workshop: Fiberoptic Endoscopic Evaluation of Swallowing (FEES) with collaboration of SA Swallowing Services

ZCSLHS organized a hands-on training workshop on FEES. The five-day workshop was led by a team of SA Swallowing Services, which delivered training and clinical services using the FEES procedures. The workshop began on September 30 and ended on October 4 2022.

The training apprises the students with a technically feasible assessment, in case the patient is too sick to move, FEES eliminates the process of taking the patient down to Radiology.

Many locals from rural areas are unaware that speech and swallowing difficulty is an alarming situation, co-founder SASS Prof. Dr. John R. Ashford said, urging that the difficulties must be assessed at the earliest so it fixes the quality of life of those who are suffering.



Won International Legal Award

The LexTalk World Conference, Dubai 23-24 March 2022, witnessed a wide range of sessions on sharing knowledge hosted by industry experts, along with bringing together the brightest legal minds fuelled by their passion for success.

Shaista Sarki, Dean Ziauddin Faculty of Law, Politics and Governance was presented with Global Lex-Falcon Award 2022 for impactfully contributing to the Legal Industry with great knowledge, reach, innovative ideas, suggestions, fruitistic spirit and approach.

The LexTalk World Conference, Dubai... - Ziauddin University | Facebook

ZIAUDDIN UNIVERSITY

DIR FLOORTIME®

**ARE YOU AN EDUCATOR, A TEACHER, SPEECH
AND OCCUPATIONAL THERAPIST, A PARENT
OR A MENTAL HEALTH PROFESSIONAL?**

The Department of Clinical Psychology at the Ziauddin University is conducting a training workshop in collaboration with the **International Council on Development and Learning (ICDL)**. The workshop will focus on the DIR model. It is a recognized framework developed by Dr. Stanley Greenspan to help understand a child's development.

The DIRFloortime® approach is particularly used as an intervention for children on the autism spectrum and other neurodevelopmental disabilities. It involves promoting joyful interactions through respectful and playful communication.

This Training Will Help You Learn:

1. To recognise common characteristics of autism and other communication and interpersonal difficulties.
2. List the salient characteristics of relationship-based strategies.
3. Describe the DIR model's six Functional Emotional Developmental Capacities (FEDCs) and difficulties that kids may encounter at each capability.
4. Recognize and explain the "I" in DIR, or individual differences, as well as how regulation, sensory processing, and health issues may affect a child's development.
5. Describe the main tenets and fundamental techniques of Floortime.
6. Recognize and describe how relationships and family play a role in the DIR model.
7. Recognize and explain the fundamental function of emotion in relation to the D, I, and R.



Trainer:

Ms. Mahnaz Maqbool,
MSCCC-SLP DIR Expert Trainer

Workshop Title:

DIR 101: An Introduction to
DIR® and DIRFloortime®

Date:

July 20-21 2022

Venue:

Abul Hasan Jafarey Auditorium,
Ziauddin University, Clifton

For Registration:

<http://registration.zu.edu.pk/login>

Registration Fee:

PKR 25000/-

2-Days Training for DIR FLOORTIME

College of speech language and hearing sciences, Ziauddin University in collaboration with #ICDL is offering a two-day training for DIR FLOORTIME. Floor time was created by child psychiatrists Stanley Greenspan, M.D. and Serena Wieder, PhD. It is based on the Developmental Individual-difference Relationship-based model (DIR). Dr. Greenspan developed the DIR model as therapy for children with a variety of developmental delays and issues.

<https://zu.edu.pk/college-of-speech-language-and-hearing-sciences-ziauddin-university/>

4

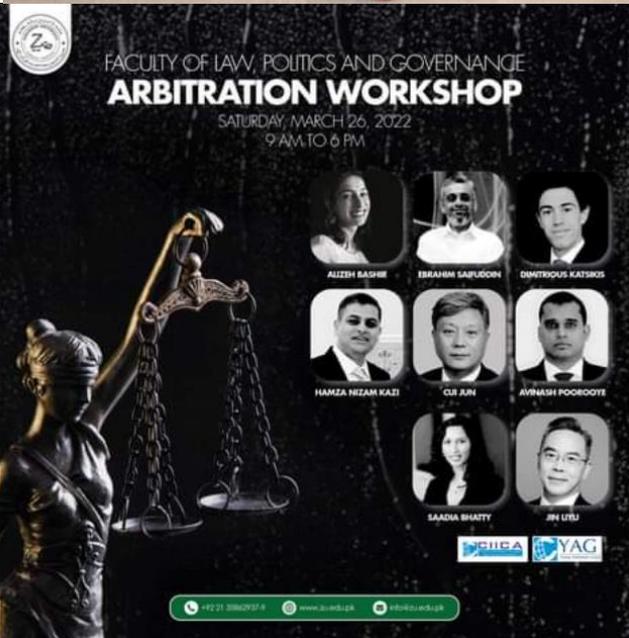


International Conference on Future Trends of Quality Assurance

Ziauddin University partners with NED to co-host the two-days International Conference on Future Trends of Quality Assurance in Higher Education 2022 on 16th & 17th May, 2022. The aim of this conference was to bring together national and international faculty, quality assurance professionals, researchers and other stakeholders to discuss ideas and share knowledge about improving quality in higher education institutions.

Ziauddin University partners with... - Ziauddin University | Facebook

5



Arbitration Training Workshop

Ziauddin University Faculty of Law, Politics and Governance's Centre for Access to Justice is honored to arrange **Arbitration training workshop** in **collaboration with CIICA (Cochlear Implant International Community of Action) and YAG** that will focus on diverse skills and to provide an exposure with the esteemed speakers, following with certificate distribution that will enlighten the students with great knowledge

Ziauddin University Faculty of Law, Politics and Governance's Centre for Access to Justice is honored to arrange Arbitration training workshop in collaboration with CIICA and YAG that will focus on diverse skills and to provide an exposure with the esteemed speakers, following with certificate distribution that will enlighten the students with great knowledge. #ZiauddinUniversity #CIICA... - Ziauddin University Faculty of Law, Politics And Governance | Facebook

6

ZIAUDDIN UNIVERSITY SIGNS AN MOU WITH THE UNIVERSITY OF NORTHAMPTON

Ziauddin University (ZU), a pioneer in graduate and postgraduate courses in many subjects and fields and an established private sector under provincial legislation, signed a Memorandum of Understanding (MoU) with the University of Northampton (UoN) on February 4th, 2022.

Dr. Nida Hussain, Pro-Chancellor, Ziauddin University signed the MoU with Prof. Nick Pefferd, Vice-Chancellor, University of Northampton.

In conjunction with the University of Northampton, the Ziauddin University will guarantee adequate teaching facilities for the delivery of the Business Management, Law LL.B. (Hons), Law LL.M., and MBA programmes.

On this occasion Pro-Chancellor, Dr. Nida Hussain said that "Ziauddin University has signed an MoU with the University of Northampton (in the United Kingdom) to offer Law and Business programmes to those students who reside in Pakistan, and the purpose of

these programmes is to offer an international degree from our Karachi campus in Pakistan".

At this moment, Prof. Nick Pefferd shared the history of Northampton University saying, "It was founded in 2005, and prior to that it was a College of Education. We have a very broad portfolio of courses for computing,

education, nursing, graphic design, leather and fashion, and of course law and business. The teaching quality of Northampton by government exercise in 2017 ranked us Gold which is the best top-quality teaching in United Kingdom universities."

Dr. Hastling McKenzie, Dean of

Academic Partnerships at the University of Northampton, was pleased to announce that from September, students will be able to apply and enrol in face-to-face teaching, this is a significant development, it's taking a long time because of the pandemic, but as we recover, we need to obtain this option for tomorrow's students. These programmes will be genuine, it will not be a distance learning programme, students will learn from highly qualified University of Northampton staff. These UK degrees are available to study at Ziauddin University in Karachi, and I believe it is a wonderful chance for anybody who wishes to advance in their professions".



Prof. Dr. Syed Irfan Hyder, Vice-Chancellor, Prof. Dr. Abbas Zafar, Dean Faculty of Health Sciences and Capt. (R) Syed Waqar Hussain were also present on the occasion of the signing ceremony.

Collaboration with University of Northampton for Degree Programs

Ziauddin University(ZU) signed a MoU with the University of Northampton (UoN) on February 4th, 2022. In conjunction with the University of Northampton, the Ziauddin University will guarantee adequate teaching facilities for the delivery of the **Business Management, Law LL.B. (Hons), Law LL.M, and MBA Programmes** to those students who reside in Pakistan, and the purpose of these programmes is to offer an international degree from our Karachi campus in Pakistan.

<https://zflpg.zu.edu.pk/ll-b-hons/>

Sustainability Community Services Projects in 2022:

| S. No. | Project Name | Participants | Project Duration | Project Area |
|--------|---|-------------------|------------------|--------------|
| 1. | Adult Literacy Program | 100 | 1 year | ED |
| 2. | Sewing Course | 35 | 6 Months | ED |
| 3. | Awareness sessions | 100 | 6 Months | ED |
| 4. | Cerebral Palsy Children Rehabilitation | 25 | 6 Months | SI |
| 5. | Community health worker training program | 25 | 6 Months | ED |
| 6. | Oral Health Promotion Activity | 50 | 1 Day | ED |
| 7. | Radio Show-awareness of speech and language disorder | All over Pakistan | 2 Days | ED |
| 8. | Teachers Training Workshop | 25 | 1 Day | ED |
| 9. | FUNDRAISER: Help the differently-abled Community | 1000 | 1 Day | SI |
| 10. | Free Speech Screening | 100 | 1 Day | ED |
| 11. | Parent Training Series | 1000 | 2 Days | ED |
| 12. | Blood Drive | 70 | 1 Day | SI |
| 13. | Wall of Kindness | 75 | 1 Week | SI |
| 14. | Child Nutrition Camp | 30 | 1 Day | ED & SI |
| 15. | Bakesale and spread awareness about World Down Syndrome Day | 500 | 1 Day | ED & SI |
| 16. | Ration Drive to Flood Victims | 50 | 1 Day | SI |
| 17. | Voluntarily Participation in NGO - Hands for Help | 200 | 1 Day | ED & SI |
| 18. | Tropical and Communicable Diseases Teaching at Hospital Facility | 350 | 1 Month | ED & SI |
| 19. | Students Participation in Medical Camp Organized by KONPAL | 150 | 1 Day | ED |
| 20. | Community Based Activities | 300 | 6 Months | ED |
| 21. | Capacity Building Training Session of Health Professional and Local Community Members | 50 | 1 Day | ED |
| 22. | Community Visit Hyderabad | 250 | 1 Day | ED |
| 23. | Water Drive | 50 | 1 Day | WR |
| 24. | Children's Day celebration with community | 500 | 1 Day | ED & SI |
| 25. | Medical Camp for Unique Children at Baldia Town | 66 | 1 Day | ED & SI |
| 26. | Free Screening Camp at Ashiyana Trust | 25 | 1 Day | ED |
| 27. | Teachers Training Session at The Aga Khan School | 20 | 1 Day | ED |

1. Adult Literacy Program

There are 5 small setup schools/gatherings in which qualified teachers are hired from the community to teach them 5 days a week for 1 year at the end of which assessments are taken. Subjects taught are English and Urdu languages and Mathematics basic level.

Link: <https://drive.google.com/file/d/1pxt6J3GS2m9uOUadWrVo6LIgU75WYqvb/view?usp=sharing>



2. Sewing Course

We have a group of 30 -35 young girls/women in every session that lasts 6 months who want to pursue their career in sewing. They get ample revenue in this job that they can do in the premises of their house and become a productive member of the society. At the end of 6 months sewing training, they are assessed and the winners get a brand-new sewing machine as a gift.

Link: <https://drive.google.com/file/d/1pxt6J3GS2m9uOUadWrVo6LIgU75WYqvb/view?usp=sharing>



3. Awareness Session:

Community/ school sessions on awareness of hand wash/hygiene, balanced healthy diet, breast feeding, contraception and iron deficiency are done on and off in the nearby schools and community gatherings.

Link: <https://drive.google.com/file/d/1pxt6J3GS2m9uOUadWrVo6LIgU75WYqvb/view?usp=sharing>



4. Cerebral Palsy Children Rehabilitation

There is unfortunately an increasing population of CP children in Sikanderabad community. We offer physiotherapy for such children so that they become less dependent on caregivers and reduce burden on the families. Also, wheelchairs and three wheeled cycles are donated so that their mobility is not compromised.

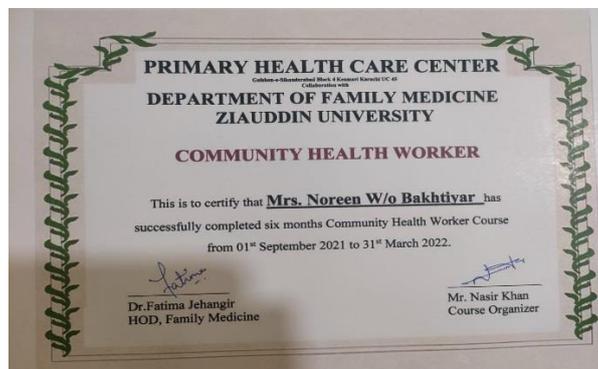
Link: <https://drive.google.com/file/d/1pxt6J3GS2m9uOUadWrVo6LLgU75Wyqvb/view?usp=sharing>



5. Community health worker training program

In order to empower the community people to be helpful to others in healthcare, every 6 months 20-25 matriculation and above passed girls and boys are given lectures on how to check vitals (BP, Temp, Heart rate and Respiratory rate) and also counseling regarding family planning methods, patient safety, preventing/treating scabies, importance of immunization, importance of prenatal visits are taught then hands on are done. They undergo an assessment after 6 months. Often few of the passing outs are hired in the primary care clinic for helping consultants etc

Link: <https://drive.google.com/file/d/1pxt6J3GS2m9uOUadWrVo6LLgU75Wyqvb/view?usp=sharing>



6. Oral Health Promotion Activity:

On 31st March,2022, Department of Community Dentistry visited to Vali Asr Comprehensive School. The main aim of the school based oral health promotion activity is to achieve improvement of oral health and prevention of common oral diseases through active community participation. An interactive session on Oral Hygiene and oral disease prevention were conducted with school children and taught them proper tooth brushing techniques through experiential learning approach.

Link: https://drive.google.com/file/d/1MaiKnywp1WbL5IKOZ8CSMOGJE3TaaoxB/view?usp=drive_link



7. Radio Show-awareness of speech and language disorder

Ziauddin University College of Speech Language and Hearing Sciences hosted a radio show through Pakistan’s biggest radio channels. On 10th August through ZU FM 98.2 and on 9th Dec, 2022 through FM 105. The awareness session was conducted by guest speakers Ms. Rabika Amanullah (SLT Consultant) from Dr. Ziauddin Hospital and Ms. Fatima Yousuf, Speech and language Therapist. The aim of this live session was to raise awareness of speech language disorders to all over Pakistan.

Link: <https://zcslhs.zu.edu.pk/news-events/awareness-of-speech-and-language-disorder-10th-aug/#:~:text=College%20of%20speech%20language%20and%20hearing%20sciences%2C%20Ziauddin,for%20different%20types%20of%20speech%20and%20language%20disorder.>



8. Teachers Training Workshop at Dawood Public School

On 20th October 2022, Ziauddin University College of Speech Language and Hearing Sciences conducted a teacher training workshop on Picture Exchange Communication System at Dawood Public school. The aim of this workshop is to train parents to learn intentional and functional communication to understand their children’s wants and needs through behavior analysis.

Link: <https://www.facebook.com/DPSPage/posts/on-20th-october-2022-the-dawood-development-unit-organised-picture-exchange-comm/10158431216862434/>



9. FUNDRAISER: Help the differently-abled Community

On 22nd December 2022, Ziauddin University College of Speech Language and Hearing Sciences organized a Fundraiser event to highlight World Disability month at Ziauddin University Clifton in collaboration with Speech and hearing association of Pakistan (SHAP) for underprivileged and low socioeconomic strata patients. Students and many vendors put up their stalls and the funds collected through sales to help differently-abled communities. All the funds then donated to support low socio-economic patients.

Link: <https://zcslhs.zu.edu.pk/news-events/world-disability-day/>

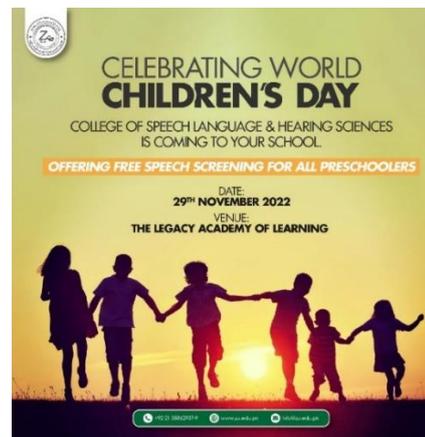


10. Free Speech Screening

On 29th November 2022, Ziauddin University College of Speech Language and Hearing Sciences celebrated WORLD CHILDREN’S DAY at The Legacy Academy of Learning. And offered free of cost screening of speech and language skills of toddlers and preschoolers ranging 1 years to 5 years of age.

The speech and language screening allows a speech-language pathologist to observe the child’s language understanding and use, production of speech sounds, vocal and nasal quality, and social language skills. Early screening of speech and language helps in identifying red flags and helps in providing early intervention to kids.

Link: <https://zcslhs.zu.edu.pk/news-events/ziauddin-university-celebrated-childrens-day/>



11. Parent Training Series

Ziauddin University College of Speech Language and Hearing Sciences conducted live sessions on Facebook for the parents aged between 1 year to 12 years. Parent training series on different topics, which are as follows:

| | |
|------------|--|
| 26-03-2022 | Parent Training Session: Early Intervention for kids with Hearing Loss |
| 26-05-2022 | Parent Training Session: Understanding Dysfluency |
| 30-06-2022 | Parent Training Session: Red Flags for SLP Disorder |
| 5-08-2022 | Management of Amplification Devices |
| 22-11-2022 | How to interact with your child |

Through this parent training series speech language Therapist educated the parents to understand their child behavior and interact with your child using different language therapist skills.

Link: <https://fb.watch/mTVMyMODrV/?mibextid=RUBZ1f>
<https://fb.watch/mTWOJIZQf8/?mibextid=Nif5oz>
<https://fb.watch/mTYkba2S2G/>



12. Blood Drive

The Ziauddin University' student society Welfare Aid organized the blood drive in collaboration with Dr. Ziauddin Hospital took place on June 23, 2022.

The facility provided by Dr. Ziauddin Hospital was well-equipped. The turnover of blood donors made this a successful event. Dr. Ziauddin Hospital provided skilled technicians who handled everything in an efficient manner.

There were more than 70 people who came to donate blood but around 40+ were allowed to donate. The students, staff and faculty showed a keen interest in donating blood.

Link: <https://zu.edu.pk/zu-events/>



13. Wall of Kindness

The Student Council of Ziauddin College of Medical Technology collaborated with Ziauddin Community Service Society to organize a project called the “Wall of Kindness”. The project began from Monday, 20th June 2022 and continued till Friday, 24th June 2022.

The donations were accepted in the form of tangible and usable goods in decent condition. Several clothes, shoes, books, bags, toys, cutlery, jewelry, sports equipment and edible snacks were collected and placed on the wall of kindness. The donations were made at the Head Office of Edhi Foundation located in Clifton. The snacks were distributed between the children of the orphanage.

Students showed immense spirit of humanity and donated wholeheartedly. The response to this project is a source of great encouragement for everyone as in testing times; we are always willing to lend a helping hand.

Link: <https://zu.edu.pk/zu-events/>



14. Child Nutrition Camp

The child nutrition camp took place on Saturday, June 25 2022 between 10 am-2 pm with the aim to educate mothers of children (aged 6 months to 5 years) about how to best deal with common illnesses their children may have. The topics chosen for this camp were diarrhea and dehydration, two very common ailments in children of this age group. The camp was held at Sikanderabad and was organized by the Ziauddin University Student Council CCA wing. 25-30 MBBS students were recruited for this camp. Volunteer sign-up forms were posted in the batch WhatsApp groups. They were then divided into 2 groups, presenters (who would be giving the presentations on the day), and designers (who would make the posters to complement the presentations).

A talk by Dr. Shahzaib M. Khan (M.D, USA), a Ziauddin University alumnus, who currently works as a Pediatric Consultant at Dr. Ziauddin hospital, Clifton. The talk was given in Urdu, and translated into Pashto by two of our volunteers. Dr. Shahzeb explained the topics in detail to the local mothers who listened attentively whilst our volunteers took care of their children. He also spoke about age-appropriate nutrition in children and answered all their questions. After this, the volunteers addressed small groups of the mothers and reiterated the information Dr. Shahzeb provided in his talks. They then distributed the care packages (ORS sachets, Lysovit Syrup, and Calcium tablets) to the mothers and clearly explained the dosages and uses for the contents of the packages.

Link: <https://zu.edu.pk/zu-events/>



15. Bake sale

On the 28th of March, College of Speech Language and Hearing Sciences, Ziauddin University, hosted an annual bake sale. This bake sale, like every year, was organized to raise funds for our under privileged clients. The kind of response the event got was overwhelming. Numerous students from other faculties came and purchased the goodies to support the cause and appreciated the initiative and hard work. The event enlightened the day and made it a little more scrumptious for everyone.

This year, College of Speech Language and Hearing Sciences aimed not only to raise funds but to also spread awareness about World Down Syndrome Day. It was a very special occasion and a major success. All the goodies were gone within few hours only and the visitors left premises being well aware of Down Syndrome.

Link: <https://zcslhs.zu.edu.pk/news-events/bake-sale/>



16. Ration Drive to Flood Victims

On 8th September 2022, Ziauddin University College of Languages, Literature collected funds for flood victims. Basic Grocery and medicines were distributed At Shah Noorani Balochistan among the flood affected people.



17. Voluntarily participation in NGO - Hands for Help

It's no coincidence that four of the six letters in the health are "HEAL"

On 4th September 2022, Students of ZUFONAM volunteered successfully with the NGO ' HFH - Hands For Help ' Karachi Sector at the Tharparkar district where they provided free medical facilities, OPD, Medicines, Awareness session along with the flood relief campaign.



18. Tropical and Communicable Diseases Teaching at Hospital Facility

Ziauddin University Faculty of Nursing & Midwifery organized a project for nursing students on the subject of Tropical and Communicable Diseases, which took place in March-April 2022. In which they went to different hospitals and teach the people about ten common diseases which can be very leading and dangerous for them. They made all the arrangements for the community and made beautiful and useful teaching aids and models for their education that could guide them in their learning process. The children have been visiting Ziauddin Hospital in Clifton and Kemari.

Link: <https://zfm.zu.edu.pk/news/report-on-tropical-and-communicable-diseases-teaching-at-hospital-facility/>



19. Students Participation in Medical Camp Organized by KONPAL

Students of BSN-III, Ziauddin University Faculty of Nursing and Midwifery participated in the medical camp at Long Khoso Village, Hyderabad on March 13th, 2022 organized by the KONPAL organization.

Where students were assigned to different tasks such as assessing the vital signs, taking the history from different age groups, how to assess patients, and to learn how to work with doctors outside the hospitals, some of the female students were assigned to go with female doctors to examine females at home and worked there. Also, provide some medicines to those who need them and learn how to educate a layman and deal with people having different age groups. While assessing patients it is found that most of the patients were malnourished, had kidney stones, and were suffering from jaundice, hepatitis C and AIDs.

Such camping activities helped students learned a lot of things like teamwork, management skills, counseling, and dealing with patients.

Link: <https://zfm.zu.edu.pk/news/report-on-ufonam-bsn-iii-students-participation-in-medical-camp-organized-by-konpal/>



20. Community Based Activities

Ziauddin University Faculty of Nursing & Midwifery plays a remarkable performance while visiting different communities and creating awareness among them. Community Health Nursing (CHN), being a part of the nursing curriculum focuses and motivates the students to take part in it. As a ritual, this year from July to Nov 2022 BSN students visited various communities mainly Dar-ul-Sukun, Ibtida, Aga Khan Health Service Pakistan (AKHSP), Public Health School (PHS), Lady Dufferin

Hospital, Rahnuma Family Planning Association of Pakistan (R-FPAP), and Community Water Filter Plant in Karachi to recognize the needs of the community.

For BSN I and III student’s respective teams lead different sessions on vaccinations, water filtration, drug abuse, special child, family planning. The purpose of community visits is not only to create awareness and identify the needs of the people who are unaware of it but also to allow students to deal with real health problems in natural settings that result in the enhancement of professional skills, communication skills, self-confidence, knowledge and awareness, critical thinking skills and teamwork skills in undergraduate nursing students.

Link: <https://zfnm.zu.edu.pk/news-events/zufonam-bsn-students-community-based-activities/>



21. Capacity Building Training Session for Health Professional and Local Community Members

ZUFONAM organized a session on Capacity Building Training session for Health Professionals and local community members of Moosa Colony, Union Council 35, District Central Karachi on November 21st, 2022. The session emphasizes Social Responsibility, Understanding Community Behaviour and needs, Methods of an effective survey, and Community engagement sessions that aim to address community notable & health professionals how to overcome their community challenges through collective efforts through sustainable goals under the great knowledge and guidance of Ms. Kousar S.K. Khan with extended support of Dr. Pamela Marshal, Dean Faculty of Nursing and Midwifery, Ziauddin University.

Link: <https://zfnm.zu.edu.pk/news-events/report-on-capacity-building-training-session-of-health-professional-and-local-community-members/>

22. Community Visit Hyderabad

ZUFONAM in collaboration with KONPAL organization arranged a visit to the Hyderabad district at Long Khosso goth on December 10th, 2022, where the doctors were also part of the community visit team. BSN students get the benefit to learn new things, promoting preventive measures, raising community awareness, and providing encouragement to inspire others toward a better life.

Many of the residents of Long khosoo village are uneducated and lack sufficient self-awareness. The students set up all of their charts and posters before beginning their presentation to raise awareness of issues including early marriages, drug addiction, hypertension, and women's and children's care. To thoroughly communicate messages to the public, students were divided into small groups. As students interacted with them, they also provided positive, even outstanding feedback to us and pledged to keep the preventive measures they had given us in mind.

More of these educational sessions that also improve the lives of our cherished surrenders should be organized to benefit students' learning.

Link: <https://zfnm.zu.edu.pk/news-events/report-on-community-visit-hyderabad-2022/>



23. Water Drive

At the time of extreme heat stroke in Karachi, Ziauddin University Faculty of Engineering Science Technology and Management students took the initiative of water drive and distributed water bottles to nearby travelers to protect them to get affect from heat stroke.



24. Children's Day celebration with community

On 20th November 2022, the College of Speech Language and Hearing Sciences in collaboration with Speech and Hearing Association of Pakistan carried out activities at three different places.

Our faculty members Fatima Yousuf, Rabbiah Sohail and Sonia Shah visited the Kiran Foundation and carried out an awareness session for its teachers. They talked about speech and language disorders, red flags that children may present with in class, and how to identify and refer to kids who may need speech therapy. They also highlighted the need for inclusive education here in Pakistan and discussed the factors that make up an inclusive setting.

Our first-year students later accompanied faculty members Fatima Yousuf, Samreen Zubair, Mehek Altaf and Taleah Tariq to Sirat ul Jannah orphanage. They engaged the children in games including passing the pillow and origami. It was time well spent, the visitors felt inspired by how spirited the little ones are, the children enjoyed fully, and received goodie bags as tokens of appreciation.

Our last stop was the pediatric ward at Ziauddin University Hospital. Fatima Yousuf and Hafeez Punjani took goodie bags for the children admitted there to help make their day a little better.

Link: <https://zcslhs.zu.edu.pk/news-events/childrens-day-is-celebrated-worldwide-on-20th-november/>



25. Medical Camp for Unique Children at Baldia Town

The Ziauddin University College of speech Language and Hearing Sciences organized a special medical camp for unique children at Baldia town. the third and final stage of the specialized medical camp ended successfully on 31st July 2022. 66 special children were registered in the camp.

With the collaboration with different teams each child had a proper consultancy and treatment along with needed accessories such as wheelchairs, hearing aids, botox, physiotherapy, cataract, lab test, etc was also done.

Link: <https://zcslhs.zu.edu.pk/news-events/report-on-the-specialised-medical-camp-for-unique-children/>



26. Free Screening Camp at Ashiyana Trust

Free screening camp was organized by The College of Speech Language and Hearing Sciences at The Ashiyana Trust (senior citizens home) on 11th November 2022. Students of MS-SLP batch-03 actively participated in this program where they conducted speech, swallow and hearing screening of women (60+ years).

Link: <https://zcslhs.zu.edu.pk/news-events/free-screening-camp/>



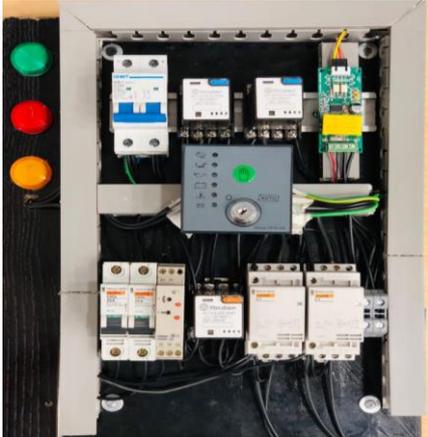
27. Teacher Training Session at The Aga Khan School

Teachers training session was conducted by The College of Speech, Language and Hearing sciences on 8th November 2022 at The Aga Khan School. MS-SLP Batch-03 prepared an awareness session on speech language concerns that need to be observed and considered in pre-school years to facilitate early diagnosis and intervention. Teachers were encouraged to discuss cases and common challenges they face while working with a child who needs extra assistance. Management strategies were discussed that would help them to plan their academic activities accordingly. They were asked to counsel parents and make important referrals for the child if needed.

Link: <https://zcslhs.zu.edu.pk/news-events/teachers-training-session/>



Sustainability-related startups in 2022:

| S # | Information |
|-----|---|
| 1. | <p>Startup name: Electrocon</p> <p>Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): EC</p> <p>URL: https://docs.google.com/presentation/d/13VWZotYh9xiIXZCW5yqCGRNsdZAtYJQMw6bX2IWvhvgg/edit?usp=sharing</p> <p>Description: ElectroCon is an IOT based startup that has recently won 0.5 million seed funding from Prime Minister Youth Program. The startup was mentored at Ziauddin and participated in multiple competitions.</p> <div style="display: flex; justify-content: space-around;">   </div> |
| 2. | <p>Startup name: ZU IDEA BAITHAK</p> <p>Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): ED</p> <p>URL:https://m.facebook.com/story.php?story_fbid=pfbid02DJNaCGJtSYAktQjv4Em1WCFdKTpeaEhmrwJpMMEvPmrdT8ZgGXRvcB5EexMRTLihl&id=492207314151567&sfnsn=scwspwa&mibextid=WiMSqg</p> <p>Description: Ziauddin University Department of ORIC, Linkages and outreach domain-initiated ZU IDEA BAITHAK to educate students for future entrepreneurship. The aim of this idea baithak is to empower entrepreneurs to build startup ideas, turn business ideas into successful business plan, learn model canvas and pitch business ideas to evaluators.</p> <div style="text-align: center;">  </div> |

3. **Startup name: AI enabled GPU based system**

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): EC & ED

URL: https://m.facebook.com/story.php?story_fbid=pfbid0Qx4F5PkfhCmoEbNEj5S3gHCJgxEHNcrpDNDiS35tyrgfTSAHSgL6HXVt7Dn4LQPGI&id=102961858130125&sfnsn=scwspwa&mibextid=RUbZ1f

Description: Ziauddin University Research Lab NCBC (National Centre for Big Data and Cloud Computing) has worked on Artificial Intelligence enabled GPU based systems. The Nvidia Jetson nano AI-enabled powerful computer is designed for powerful entry-level edge AI applications and devices.

Photos:



4. **Startup name: Madad**

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): SI

URL: https://drive.google.com/file/d/1RxcQKsRPNkabx_6KVvLmo5yuWJJNetQF/view?usp=drive_link

Description: Madad is a startup that was envisioned to benefit the health sector. On a rudimentary level, the startup is an ambulance service with other business models for a remote health clinic.

Photos:



5. **Startup name: Urban Forest Tree Plantation**

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): SI

URL: <https://drive.google.com/file/d/15bjdMP9NFR-a8uPiKAHJ0FJgzLFozvpL/view?usp=sharing>

Description: Ziauddin University has collaboration with Sindh Forest Department (SFD) which is under of Green Pakistan Programme for Urban Forest Tree Plantation In this Collaboration SFD will provide environment friendly plants, labor and technical assistance, guidelines and protection of provided plants to the land of Ziauddin University Link Road Site. Ziauddin University is providing their land for the plantation on a large scale. ZU will provide water and proper maintenance to Urban Forestry Plantation.

Photos: Urban Forest Area Marking & Plantation



6. **Startup name: Smart Traffic Monitoring System**

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): TR

URL: <https://fb.watch/gcWL7L6mEx/>

Description: The Data Acquisition, Processing and Predictive Analytics Lab - Ziauddin University has developed a Smart Traffic Monitoring System that efficiently read the number plate in one of its modules. This number plate detection technique can be used in Vehicle Entry/Exit system, automated barrier opening system, Toll Plaza and roadsides for the detection of specific cars. The interpreted data will be stored and tracked easily through our system for any required records. That can also be used in the future for monitoring which car has high carbon emission and needs to be repaired/maintenance immediately.

Photos:



Smart Traffic Monitoring System

Camera 1

Number Plate Detection

Stop

Detected Plates

AZP443



Data Acquisition, Processing
© Predictive Analytics - NCIBAC
SCHOOL OF ENGINEERING SERVICE TECHNOLOGY AND MANAGEMENT
ZIAUDDIN UNIVERSITY

7. **Startup name: ZEE Solar Cafe**

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): EC & SI

URL: <https://drive.google.com/file/d/1pkqvJiMFmpkbEYVFEXoad3K7gZDQVnCM/view?usp=sharing>

Description: Ziauddin University prefers sustainability in all their operations and activities. One of their initiatives is covering Cafeteria shades with solar panel roofs. Such technology would reflect heat from the sun and use the sun’s energy to power buildings and electric appliances. We think we have a multipurpose product that can provide shade to students from burning heat of sun and also generate renewable electricity and can change the view of a grey, empty space or old style parachute Umbrella into a nice architectural function.

Photos:



8. **Startup name: Solar Street Lights**

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): EC & SI

URL: <https://drive.google.com/file/d/1zIg9gDwI2hdD80gPDwey0dLEUeV82hFp/view?usp=sharing>

Description: After successful implementation of Solar Parking and Solar Café Ziauddin University started a new chain of sustainability developed with the initiative of Solar Street lights. Such technology would reflect heat from the sun and use the sun’s energy to light the streets at night. We replaced all our old traditional street lights into new solar street lights in our Sukkur Campus and Link Road site. Which are not only attractive but also save our energy consumption. These street lights also help residents to move from the surroundings without fear of darkness.

Photos:



9. **Startup name: Sehat Kahani**

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): ED

URL: <https://sehatkahani.com/>

Description: Sehat Kahani (SK) is the Startup to empower career-oriented women Doctors and facilitate patients who are not able to visit Doctors for physical examination. This was initiated by a Ziauddin University Student. More than 50% of Female doctors in Pakistan leave their career midway because of so many reasons including marriage, children, household activities and so on. Sehat kahani is connecting these female doctors to patients using video conferences and telemedicine who are not able to visit or access doctors physically. The Agreement made between Ziauddin University and Community Innovation Hub (Sehat Kahani). They both will collaboratively enhance and expand the overall scope of primary healthcare and digital healthcare practices in communities across Pakistan. Ziauddin University is facilitating Sehat Kahani in creating new linkages and outreach through workshops, co-creating a co-branded Telemedicine course alongwith its accreditation for SK doctors and other physicians. Ziauddin University also acknowledged Sehat Kahani as a partner for TeleMedicine Course on all digital media Platforms and helped create a stronger brand image within the market and vice versa.

Photos: https://drive.google.com/file/d/1zoBIB89rug4nIuTgZ33e_-BeeP2IxdVd/view?usp=sharing



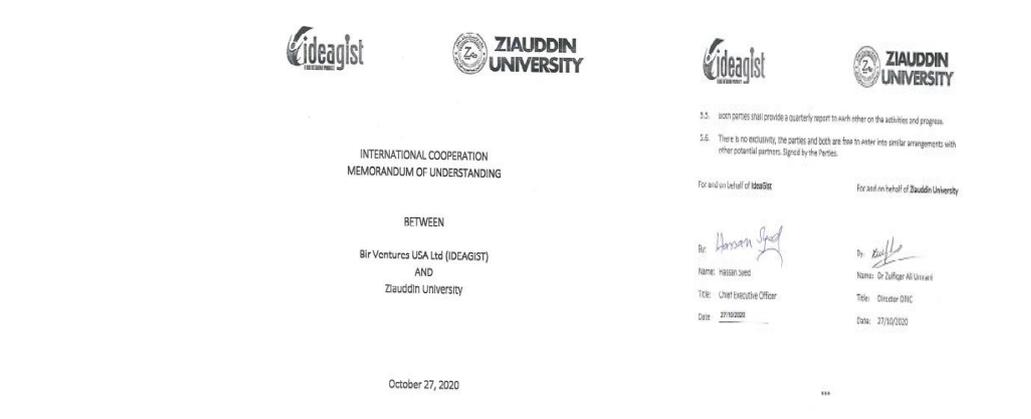
10. **Startup name: Kamyab Jawan**

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): ED

URL: <https://drive.google.com/file/d/1WQRiYocBuJeeJTF0lvrPbLqGQoj-vLDc/view?usp=sharing>

Description: Under the umbrella of the Prime Minister’s Startup Pakistan, IdeaGist plans to invest PKR 8 billion, over the next five years, in the entrepreneurial & innovation (E & I) ecosystem in Pakistan. To develop a connected startup ecosystem, IdeaGist plans to partner with different organizations Ziauddin is one of among all. On 27th October, 2020 Ziauddin University and Ideagist signed an MOU for three years or until further agreement.

Photos:



1
1.

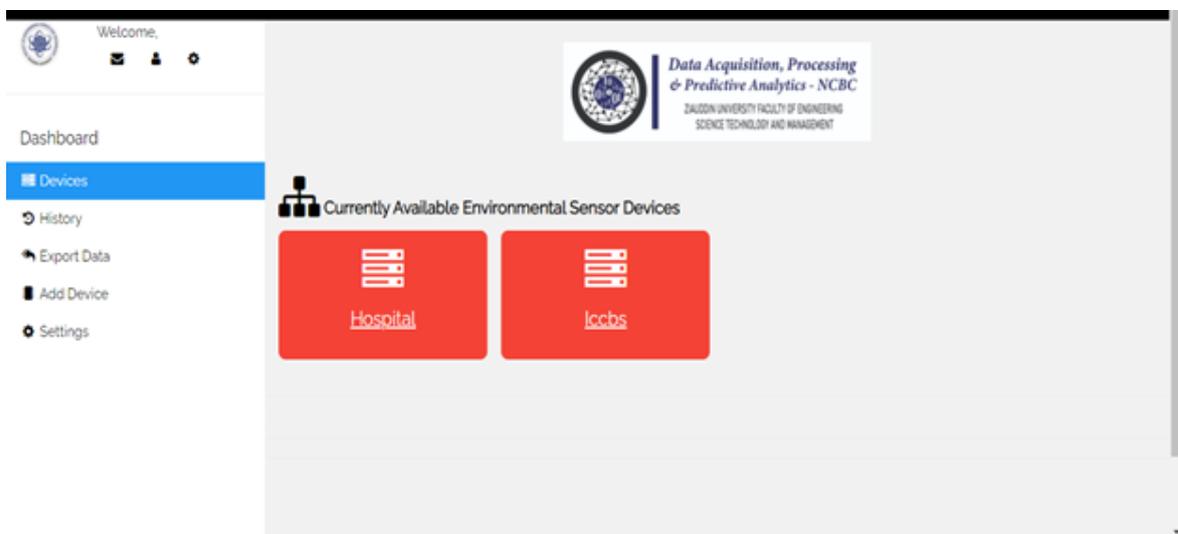
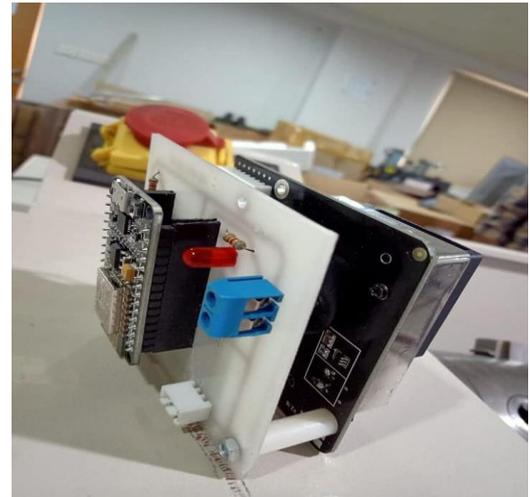
Startup name: Multi-Parameter Environmental Monitoring Device

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): EC

URL: <https://www.facebook.com/ZUNCBC/>

Description: Environmental monitoring is a critical issue of the world these days. Pakistan; the 5th highest a populated country faces challenges due to the polluted environment. With ever-increasing traffic and industrial requirements, pollution is growing at a fast pace in almost all of the big cities in Pakistan. Karachi, being the metropolitan city and the country & industrial hub is facing environmental pollution more vehemently. To overcome this issue many indoor and outdoor environmental devices are available in the market with limited sensors. Our system is a fusion of the internet of things (IoT), Wireless Sensor Node (WSN), and Big Data & cloud computing. The system comprises hardware and software, whereas the hardware module includes multiple sensors like Temperature, Humidity, Particle Sensor (2.5 and 10mm), carbon-di-oxide, oxygen and voice sensor for environmental monitoring. Furthermore, to identify the exact location of polluted areas, a GSM module is integrated in the system. In addition, the system is able to calculate and monitor the Air Quality Index. The whole system is integrated with a data center to store the live data; however, a web-based application is also developed to monitor sensor reading.

Photos:



1
2.

Startup name: Legal Clinic

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): ED

URL: <https://www.facebook.com/zfl.zu/posts/1746212465537458>

Description: Carrying forth Ziauddin Faculty of Law’s mission of helping the public and evolving the legal climate of Pakistan, Ziauddin Faculty of Law have now introduced a Legal Clinic. This Means our lawyers are present to aid our society with pro bono legal advice regarding civil cases. Anybody can easily reach out to us at our legal clinic 9 AM to 1 PM on Mondays and we will guide them to a path most beneficial for them.

Photos:



1
3.

Startup name: Legal Incubation Centre

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): SI

URL: <https://www.facebook.com/zfl.zu/videos/the-incubation-centre-at-the-ziauddin-faculty-of-law-offers-an-allocated-office-/265610128090348/>

Description: The Ziauddin Faculty Of Law has started a Legal Incubation Centre where licensed lawyers are provided with the opportunity to kickstart their law firms and do their part in evolving the legal climate of Pakistan. The services offered include an allocated office space, research resources and assistance from students in the form of interns. The Incubation Centre at the Ziauddin Faculty of Law offers an allocated office space to young lawyers who want to start their own law firm but lack appropriate funds and resources. We are searching for licensed advocates who are motivated to bring a change to Pakistan’s legal system. These individuals will be provided with a co-working office space, research resources, and an inspirational atmosphere – all free of cost.

Photos:



1
4.

Startup name: Incubation Centre

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): SI

URI: <https://zu.edu.pk/oric/introduction/achievements/>

Description: Ziauddin University celebrated Global Entrepreneurship Week and launched a Business incubation program for Students, Faculty, Alumni and Clinicians on Thursday 11th Nov 2021. The Pro Chancellor ZU Dr. Nida Hussain, Vice-Chancellor ZU Prof. Dr. Irfan Hyder and Director ORIC ZU Dr. Zulfiqar Ali Umrani, inaugurated the Launch of Pre-incubation and a start of a new entrepreneurial journey. The pre-incubation is a 3-month certificate training program for aspiring entrepreneurs of Ziauddin. For this auspicious event, we had guests from the entrepreneurial fraternity and esteemed dignitaries from national level: Dr. Ruksana David Principal Kinnaird College Lahore, Azfar Hussain from National Incubation Centre, Karachi, Dr. Iffat Zafar Founder and COO Sehat Kahani, Adeel Durvesh Founder of Parhaosabaq, to inspire the young pre-incubates. The sample pitches were just a glimpse of the hard work and effort the pre-incubatees had put in. Their ideas were out of the box, refreshing and competitive.

Photos:



1
5.

Startup name: Edulearn Tools

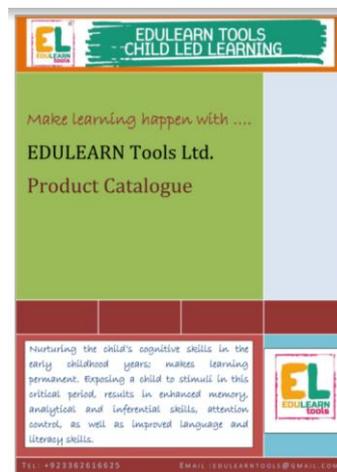
Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): ED

URL: https://www.facebook.com/pg/edulearntools/events/?ref=page_internal

[EDULEARN Tools Catalogue.pdf](#)

Description: Ziauddin University College of Speech Language & Hearing Science Principal Dr. Amina Siddiqui started an EDULEARN Tools for child cognitive learning. Nurturing the child's cognitive skills in the early childhood years; makes learning permanent. Exposing a child to stimuli in this critical period, results in enhanced memory, analytical and inferential skills, attention control, as well as improved language and literacy skills.

Photos:



1
6.

Startup name: Solar Parkings

Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): EC & TR

URL: https://drive.google.com/file/d/1AKMgv2_MXrl_sasy2U1v31g0t3Gy9spG/view?usp=sharing

Description: Ziauddin University prefers sustainability in all their operations and activities. One of their initiatives is covering parking lots with solar panel roofs. Such technology would reflect heat from the sun and use the sun’s energy to power buildings and electric appliances. We think we have a multipurpose product that can cover our cars, generate renewable electricity and can change the view of a grey, empty space into a nice architectural function.

Photos:

