Avinashilingam Institute for Home Science & Higher Education for Women

(Deemed to be University under Category 'A+' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12 B
Coimbatore – 641 043, Tamil Nadu, India

GREEN AND SMART PRACTICES IMPLEMENTED IN THE INSTITUTION

The institution has been re-accredited (fourth cycle) with **A+ grade** by the **National Assessment and Accreditation Council (NAAC)**. Apart from the academic and administrative strengths, the **green practices** adopted by the institution at all the levels (administrators, teaching and non-teaching staff members as well as the students) have made a very significant contribution to achieving this high grade.

Technology has been integrated into the functioning of the institute effectively to boost up the green initiatives adopted in the campus. e-initiatives are being adopted effectively in the teaching-learning process. The campus has a 24x7 WiFi access to all members and the server is operating using **cloud computing**. Both the campuses of the institution have been virtually networked by **video conferencing** facilities.

E-campus automates the day to day administrative processes and streamlines the flow of information which ensures smooth functioning of the University. Its user friendly approach helps in greater operational control and better co-ordination of activities. The eCampus Modules include **Admission Management, Class Planner / Academic Setting / Attendance, Examination Management, Fee Management, Faculty Portal, Student Portal, Project Management, Hostel Management, Transport Management, Event Management and Document Management**.

Biometric (Face recognition) entry is implemented and the data is integrated from six machines.

The library has software like Grammarly, INFED and EZproxy which help the faculty members, scholars and students to have local and remote access to the library resources on 24/7 basis by adopting virtual learning environment. OPAC/web OPAC is the tool for providing access to the library collection. 80 systems are made available for access to online resources.

A separate well-equipped digital library with 40 nodes is housed in the central library and faculty of engineering to access the e-resources. The ILL (Inter-Library Loan) is provided to the readers through DELNET and J-gate Plus. The RFID technology implemented in the library helps for quick access to library resources and better security of library materials. Staff publication, theses, rare books, question papers are digitalized and institutional repository through Dspace is created.

LMS (learning management system) / e-lessons for virtual learning, etc. have been prepared by our staff members, which helps in flexible and self-paced learning by the students. Similarly, **group sms** to parents are being sent to communicate important information like fee payment due dates, student's progress, important notices and alerts, examination schedules, etc.

The adoption of such **smart practices** has enabled us to make a **paperless office**, where the use of paper is minimal. The institutional website is maintained by **cloud computing**. A **Robotics laboratory, an IoT laboratory, a Cloud laboratory and an Artificial Intelligence laboratory** have been set up and are fully functional in the campus. Student projects have been successfully executed for using IoT, Big Data, Cloud computing for developing smart car parking with pollution control, automated fire detection and extinguishing system, etc. These initiatives will also be implemented in the institution in the near future.

A very efficient **rain water harvesting system** is also available in both the campuses of the institution, with multiple harvesting units and storage tanks. As the profile of the ground is not even, rain water harvesting is done by **percolation pond** constructed in low lying areas. The rainwater is in infiltrated into the pond for **recharging groundwater**. Adequate efforts to raise the water table within the institution's campus sites in both the campuses are given due consideration. Rain water harvesting facility provided in the Institution includes **rain water recharge pits, percolation pits, leach tanks, check dams, and a pond** which gets filled during rainy season. The measures adopted not only help in supply of water but also to raise water table in the neighbourhood. The structures are very useful in facilitating easy flow and collection of storm water for future use. The measure also prevents water stagnation and breeding of mosquitoes and other insects.

Apart from this, the used and sewage water is also recycled maximally in both the campuses. Grey water let out from all sources are used for gardening purposes, thus ensuring zero wastage of grey water. The effluent from the STP is used to irrigate the trees in the Nakshatra Vanam (a special garden raised with trees associated with zodiac signs), coconut palms and other trees – fruit-bearing, shade giving and ornamental. Treated and recycled water from all the STPs are also channelized into the dual plumbing system for toilet flushing and wash areas for cleaning the institutional vehicles.

The Institution thus achieves both water conservation and use of renewable energy, both being the two priority sectors of the Nation simultaneously. The endeavour results in reduced water use and also enables cut on water bills incurred by the Institution. Stakeholders in the campus are instructed to be prudent in the use of water. Awareness on efficient and disciplined uses of water are given adopting the following strategies

- Having signboards stressing on the need to save water, plant more trees
- Observing World Environment day/ World Water day
- Research studies on water conservation / recycling measures
- Collaborative endeavours with 'Siruthuli', an organization that promotes water conservation to the fullest
- Growing self-thriving plants/ trees, plants that require less water
- Retaining trees between constructions
- Forming various clubs, like the Eco club to spread awareness among students and to harness student power for the sustainable development.

Maintaining the green landscape is another prime consideration of the institute. Floral diversity may be considered as backbone of biodiversity. Plant diversity is important from medicinal, economical, ecological, environmental, as well as aesthetic point of view. Conservation and maintenance of flora and fauna is our main commitment. Our campus diversity consists of medicinal plants, ornamental/shade herbs, shrubs and trees. The Nakshatra Vanam gives a spiritual touch to the students and faculty. It gives a key to the formation of a healthy biosphere and contains 27 sacred plants. Careful thinking and hard work of our students resulted in setting up a big herbal garden, which consists of about 200 medicinal herbs that give a pleasant breeze to the visitors. The campus has green landscape of trees which includes Neem, Terminalia, Mimusops elengi, Millingtonia, Delonix etc. Many seminars and workshops are organised to emphasize the need for conservation of biodiversity.

The use of plastic is discouraged in the campus. Refreshments and food items are served in dried and moulded palm leaf plates and containers. Beverages are served in glass or stainless steel containers only. The use of plastic and plastic-coated dispoware is totally not in vogue within the campus.

According to the green audit report of the institution, the campus balances, in perfect homeostasis, the utilization of energy from the available resources. The establishment of solar panels to fulfil the power requirements form the integral part of the renewable energy resource. The presence of extensive greenery reduces the pollution levels which simultaneously encourages the diversity of fauna. The utilization of water from other sources such as, check dam can even be channelized to meet the requirements. The practice of minimal usage of plastic-wares makes the campus an Eco-friendly zone. The green audit assists in the process of maintaining pollution free environment in the campus and guides in decision making for the sustainable development of the institution.