

Locally Rooted Globally Competent Education

PRADNYA NIKETAN EDUCATION SOCIETY, PUNE

NAGESH KARAJAGI *ORCHIO* COLLEGE OF ENGINEERING & TECHNOLOGY, SOLAPUR.

(The Degree Engineering College affiliated to Solapur University, Solapur & Dr. Babasaheb Ambedkar Technological University, Lonere from AY 2017-18 approved by A.I.C.T.E. New Delhi & Recognized by Govt. of Maharashtra)

AICTE Permanent ID: 1-2893356, DTE Code: EN 6223

POLICY MANUAL

(Approved by the Board of Governance)



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N. K. OPCHIO COLLEGE OF ENGINEERING & TECHNOLOGY, SOLAPUR

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Date: 05/06/2023

CERTIFICATE

This is to certify that the Policy Manual Version-II of Nagesh Karajagi Orchid College of Engineering and Technology, Solapur is prepared as per the guidelines of A.I.C.T.E., University and State Govt. rules and regulations.

It contains Academic, Administrative and other policies related to our Institute & contains total 125 pages respectively.

Hence certified.

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(Mr. Vilas Patil)
SECRETARY
Pradnya Niketan Education
Society, Pune.

Chapter AD - 9

Environmental (Green) Policy

9.1 About College

With the Vision of "Locally Rooted, Globally Competent Education", N. K. Orchid College of Engineering & Technology, Solapur (NKOCET) started from the academic year 2008-09. NKOCET is approved by AICTE, New Delhi, recognized by Government of Maharashtra affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere. The NKOCET has spread over picturesque, sprawling land of 10.6 acres in the vicinity of Hipparga Lake in Tale-Hipparaga, Solapur. It has emerged as a preferred knowledge destination for aspiring Engineering students. NKOCET provides excellent engineering education and creates globally competent technocrats. The trust, Pradnya Niketan Education Society, Pune has been founded by 14 highly educated eminent Technocrats, Bureaucrats and Entrepreneurs who have envisioned transformation of society through education and to serve for welfare of the people.

Taking into account the necessity of protecting environment for a sustainable, pollution-free and healthy life on the planet Earth in the coming years, the college has formed its Environmental Policy. The college endeavours to follow this policy strictly by actually enacting to and also creating environmental consciousness among the students, faculty and staff and thereby among the society in general by organizing various activities within and outside the campus.

The college works towards creating a green, pollution-free and healthy environment. The students are given strict instructions to maintain the campus clean and green and it is reflected in the college Prospectus.

9.2 The Clean and Green Campus Policy

The Green Campus Policy of the college envisions a Clean and Green Campus where environment friendly practices and education combine to promote sustainable and eco-friendly practices in the campus and beyond the campus. It also offers the institution an opportunity to take the lead in redefining its environmental culture through instilling environmental ethics among the students and staff.

9.3 Mission

To create environmental consciousness among the all stake holders and active involvement in the activities to protect the local and global environment from the human invasions, pollution-free and healthy life ahead.

9.4 Objectives

- To sensitize the students and the staff to minimize the use of polluting products and use environmentally friendly products and services.
- To inculcate in the students the importance of cleanliness for a healthy life
- To Create awareness about environmental issues by organizing Events, Rallies, Awareness Campaigns, Cleanliness Drives, Seminars, Workshops, presentations, Tree Plantation Drives, Rangoli Competitions, Essay Competitions, Guest Lectures, Talks, etc.
- To make students and staff aware about raising voice against the hazardous practices destroying Nature and promote environmentally friendly practices among the society.

9.5 Initiatives Taken to Implement the Clean and Green Campus Policy

NKOCET is committed towards managing its campus in accordance with its Clean and Green Campus Policy by establishing the following infrastructure and carrying out the following activities:

- Landscaping with Trees and Plants
- Ban on Single-Use Plastic
- 36 KW, Solar Plant in the College
- Proposed Solar Water Heater in the Girls and boys Hostel
- Rainwater Harvesting
- Paperless Office and Communication though emails and whatsapp groups
- Environmental Air Quality Monitoring of Solapur, Barshi, Pandharpur and Dharashiv City and the Establishment of 'Continuous Ambient Air Quality Monitoring Station'
- Solid Waste Management in the campus
- Laboratory liquid waste management system through percolation system
- Onsite Greywater treatment plant (Capacity 80,000 Lit/day)
- Hazardous Chemical Waste Management
- Water Management
- E-waste Management
- Display Boards to Promote Environmental Sensibility in College Campus
- The Green, Environment and Energy Audit
- Mini and Major projects based on environmental issues

9.6 Landscaping with Trees and Plants

As per the Clean and Green Policy, NKOCET strives to plant various types of trees in large numbers within the campus. Gardeners and full-time adequate support staff have occurrent to the control of the

been appointed for the maintenance of gardens and keeping the campus litter-free, clean and Green.

The tree-plantation drives are undertaken by the NSS Unit of the college.

9.7 Ban on Single-Use Plastic

NKOCET is a plastic-free campus where there is a complete ban on single-use plastics in classrooms, laboratories, canteen, hostel, and in the other premises. The college facilitates environment friendly substitutes like stainless steel, washable and reusable tumblers at all water units and mandates the canteen to serve only in stainless steel or paper plates/glasses/cups to systematically ban the use of plastics on the campus.

9.8 36 KW, Solar Plant in the College

The college has established the 36 KW Solar Energy Plant on the C-Building of the college in the year 2014. There is a substantial decrease in the MSEDCL Electricity Bills since the installation of solar plant. The energy output of the solar panels is connected to the power grid of the MSEDCL where the power produced by the solar panels are supplied to the grid for which subsidy has been provided by the MSEDCL for the power consumption of the NKOCET.

9.9 Proposed Solar Water Heater in the Girls and boys Hostel

It will be functional after completion of hostel building

9.10 Rainwater Harvesting

The college ensures rain-water conservation through rainwater harvesting. The rain water from the roof top outlets is carried through the well-connected pipelines to the recharge pits for ground water recharge. These pits help recharging of two bore wells in the campus.

Excess runoff flows towards Hipparaga lake.

9.11 Paperless Office and Communication: -

The college has a policy to minimize the use of paper in all types of official/academic communication of the college through E- Communication i.e Emails, WhatsApp groups.. The use of paper is substantially reduced through digitization. One-side blank pages are used to avoid wastage of paper. All the college staff have been provided with



college E-mail IDs and through which they make all the required official and collegerelated communication. What's app - Class-wise groups, Department wise groups, Committee wise groups have been formed which have reduced the usage of paper in notices and circulars.

This practice has proved highly beneficial to save money, boost productivity, save space, make documentation and information sharing easier, and help the environment.

• Environmental Air Quality Monitoring of Solpaur, Barshi, Pandharpur and Dharashiv City and the Establishment of 'Continuous Ambient Air Quality Monitoring Station'

Smart cities are expected to be urban spaces that provide a decent quality of life to their citizens by offering a clean and sustainable environment. For a Smart city, it is necessary to monitor the environmental conditions for identifying the sources of pollution and mitigate them. A network of low-cost air quality monitoring sensor nodes can be deployed to monitor the air-quality and meteorological parameters across the city. The city can take corrective measures and improve its environmental health by getting acquainted with the various sources causing pollution in the city. A holistic view can be derived, which enables the authorities to make data-driven decisions for the infrastructure and policy planning.

Ambient Air Quality Monitoring of Solapur, Barshi, Dharashiv and Pandharpur city is carried out by the Department of Civil Engineering. The students pursuing the UG are involved in this project and get an opportunity to avail hands-on training of handling the sophisticated instruments used to measure and analyze the criteria pollutants. They also get aware and cautious about the spread of pollution in the city and can work as effective volunteers to control pollution.

The air quality monitoring was conducted with the help of 2 types of air samplers at 9 locations.

The reports based on analysis are submitted every month to the pollution control board and Municipal corporation. The Solapur Municipal Corporation uses this submitted data for preparing Environmental Impact Statement (EIS) of the city.

9.12 Solid waste Management

The Solid waste generated in the campus is segregated as bio degradable (Wet) and non-degradable (dry). Wet waste is anaerobically composted in earthen pits. All the Departments, laboratories, and Classrooms are provided with dustbins for dry wastage disposal. Segregation of the waste into dry and wet waste ia done through the separately allotted dustbins at strategic locations in the college.