

# AICTE ENVIRONMENT POLICY







# **AICTE Environment Policy**

It is the policy of AICTE to include environment conservation in decision making at all levels by stakeholders and to ensure awareness among all about conservation environment and natural resources. It is the policy of AICTE to encourage projects and initiatives on afforestation, landscape and ecosystem restoration, soil and water conservation, water quality maintenance, waste management, clean energy resources and climate change mitigation.







# Message by Chairman

AICTE's vision has been to ensure quality education and to regulate and maintain norms and standards. The Environment Policy 2020 is in line with this vision.

Education is not complete without its application in real life; and to apply anything in life, one must understand the process of life. Environment is the basis of life and therefore, its protection and conservation is an important part of education.

A large part of the emission in the environment, are caused by manufacturing of products. It is therefore the responsibility of the future engineers to build designs that are more environment friendly. As global citizens, it is the responsibility of the next generation to increase the natural resources to reverse the climate change.

Being Committed to the cause of environment, following programmes undertaken by AICTE for the last 4 years are

- 1. Mandatory non-credit course on environment science
- 2. Universal Human Values course highlighting values and connecting Homo sapiens with the nature and environment
- 3. Smart India Hackathins solving environmental challenges

The declaration of AICTE's Environment Policy 2020 in the midst of COVID19 is a step to ensure a safe and prosperous future for the next generation.

The Policy is in line with the vision 2030 of the Government.

I hope that the Environment policy will be appreciated by the Institutions and included as a part of their decision making.

Chairman (AICTE)







# Message by Vice Chairman

AICTE's Environment Policy 2020 is a reference document for all Technical Education Institutions. The Policy is drawn to emphasize the interdependence of technology with nature. The future technologies being discussed today are the ones that strike the right balance between the human need and nature.

Awareness and concern of the Environment, while designing solutions, is required for the next generation technological innovation. Environment Management has been a mandatory subject in engineering and continues to be so. There have been initiatives in the past for engaging students with activities related to conservation of environment and there will be more initiatives in the coming times.

This Policy reiterates the importance of Environment Management for Technological Institutions and urges its inclusion as a guiding point in internal decision making.

Vice Chairman (AICTE)





# Message by Member Secretary

AICTE's Environment Policy 2020 is announced as a guiding document for institutions. The reference points are not just for AICTE, but also for affiliating institutions, so that the decisions fuel the sustainability and conservation goals for Environment Management.

The Institutions have shown credible concern towards environment management in many of AICTE's initiatives like Clean and Green Campus competition, One student One tree etc. I am hopeful that with the announcement of the Environment Policy 2020, the institutions will show more responsibility towards the immediate surrounding environment and build students who are concerned towards nature.

I would urge the institutions to participate in AICTE's existing initiatives like Unnat Bharat Abhiyan, Rural development (AICTE Activity Points), Jal Shakti, One Student One Tree, Solar Energy, Clean and Green Campus etc. that are announced from time to time; and also take initiatives within their institutions to further the cause of Environment conservation and Sustainable development.

Member Secretary (AICTE)







#### **Committee Members**

Prof R. K Srivastava Ph.D. (Chem. Engineering-IIT Delhi) M.I.A.A.P.C., M.I.S.C.A, M.N.E.S.A, M.P.H.S.S.F.S.S. Ex. General Manager - VCCS Pvt Ltd. New Delhi Formerly Expert Member, SEAC (EIA)-U.P. Govt. Chairman- SEAC (EIA)-Uttarakhand Govt. Professor & Head, Department of Environmental Sciences G.B. Pant University of Agriculture and Technology, Pant Nagar, Udham Singh Nagar (Uttarakhand)

Shri Vir Singh

Ex-Professor, Department of Environment Science GB Pant University of Agriculture and Technology

Pant Nagar, Uttarakhand

Director Communication at the university

Coordinator, Liberal Education and Acting Dean Student Welfare INNO-ASIA project sponsored by the German Federal Ministry BMBF

Published 52 books, many monographs, lab manuals and more than 200 articles.

Dr Sunita Singh, IFS

Chief Vigilance Officer, Rural Electrification Corporation Ltd. PhD, TERI University,

Ex-Additional PCCF (P&M), Wildlife, Maharashtra Forest Department

Gold medal for best Forest Management by the State Government in the year 2000

IDRC Graduate Research Awards on Climate Change and Water for her PhD research

Team at AICTE

Dr Neetu Bhagat, Deputy Director, Induction Program Cell Ms Shweta Bhatnagar, Innovation Officer





The policy of AICTE is to conserve natural environment, develop sustainable solutions, innovations and startups, promote rural technologies and control energy consumption in order:

- To build awareness among students about conservation of natural resources and development of sustainable environments for national prosperity
- To facilitate development of technologies in rural India for inclusive growth
- To adopt fair, ethical and environmentally-friendly approach, which incorporates everything from implementation to training of students through institutions
- To evolve futuristic technologies and develop engineering designs that could be pivotal for the sustainable utilization of the augmented natural resources
- o To help building up a society that has conservationoriented attitude and exists in harmony with nature





## **Policy Objectives**

The Long-term goals for educational institutions include:

- o To educate and engage students and employees on environmental concerns and sustainability
- o To recognize and appreciate the efforts of students and institutions towards environment conservation and sustainable development
- o To promote innovation and startup for sustainable development
- o To help and encourage the affiliated institutes to adopt working styles and evolve R&D programs that could turn them into carbonnegative institutes
- To include environmental policy in all related and applicable policies of AICTE.
- To take into account environment, occupational health and safety aspects in planning and decision-making.
- To encourage rural development programs and provide rural India with professional resource support from institutes of higher education
- To encourage projects and initiatives on afforestation, landscape and ecosystem restoration, soil and water conservation, water quality maintenance, waste management, clean energy resources and climate change mitigation
- o To develop collaborations of academic institutions with key government flagship programs and foster collaborations between governance, knowledge institutions and local communities





## **Policy Implementation**

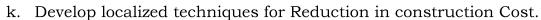
AICTE understands that ecological sustainability is a key component of its social responsibility and therefore, strives to make an impact on environment conservation by inspiring environment-friendly, professional and safe operations in students of institutions. This includes conserving scarce resources such as raw materials, energy and water, as well as avoiding and reducing CO2 emissions and waste. AICTE has adopted a fair, ethical and environment-friendly approach that incorporates everything from the production to management and training of students in institutions.

## Scope

- **1.** All AICTE approved academic institutions to include the Environmental Policy in their institutional policies and strategies
- **2.** Institutions to mention the activities and initiatives undertaken under AICTE environment policy in their Annual Report and ensure publication of the same on institutional website

#### Inclusion in Curriculum:

- 1. AICTE Model Curriculum to include subjects that enhance Environment Management and Conservation awareness and knowledge.
- 2. Student Induction Program to include awareness on Environment and activities like visit to nearby villages.
- 3. Approved courses to include engineering in Environment, marine, water technologies, carbon engineering etc. that can help develop technologies for enhancing or safeguarding the environment.
- 4. Facilitate development of research areas such as drinking water, agricultural and rural industries etc. which have development aspect
- 5. AICTE Activity points to be made a part of Model Curriculum (through internship policy). AICTE Activity points include the following:
- a. Prepare and implement plan to create local job opportunities
- b. Prepare and implement plan to improve education quality in village.
- c. Prepare an actionable DPR for Doubling the village Income.
- d. Developing Sustainable Water Management system.
- e. Prepare and Improve a plan to improve health parameters of villagers.
- f. Developing and implementing of Low-Cost Sanitation facilities.
- g. Prepare and implement plan to promote Local Tourism through Innovative Approaches.
- h. Implement/Develop Technology solutions which will improve quality of life.
- i. Prepare and implement solution for energy conservation.
- j. Prepare and implement plan to Skill village youth and provide employment.



- 1. Prepare and implement plan of sustainable growth of village.
- m. Setting of Information imparting club for women leading to contribution in social and economic issues.
- n. Developing and managing Efficient garbage disposable system.
- o. Contribution to any national level initiative of Government of India. For example. Digital India/ Skill India/ Swachh Bharat Internship etc
- 6. Inclusion of Universal Human Values as a credit course in 3<sup>rd</sup> or 4<sup>th</sup> year. The curriculum, as developed by the NCC-IP (National Coordinating Committee Induction Program) would be taught. One of the modules includes Harmony with Nature, which is about environmental conservation and sustainable development.

#### **Environmental Awards**

- 1. Awards for Rural development initiatives, environment development initiatives, sustainable development initiatives etc. to be announced for institutions annually
- 2. The Chhatra Vishwakarma awards to be conducted annually with at least one category for environment conservation, sustainable development etc.
- 3. Institutional awards of clean and green campuses to be announced annually for institutions
- 4. Encourage and award Innovations and startups that are based on environmental issues, rural development and sustainable solutions
- 5. Promote and initiate other awards among and within institutions for enhancing awareness and implementation of Environment management and Sustainable Development

## Policy reference points

- 1. United Nations Sustainable Development Goals 2030 to remain as thrust areas with special focus on Clean Water and Sanitation, Quality Education, Affordable and Clean Energy, Sustainable Cities and Communities, Climate Action, Life Below Water and Life on Land.
- 2. Environment conservation, rural development, sustainable development etc. to become a part of all policies of AICTE such as Startup Policy, Internship Policy etc.
- 3. Institutions to ensure Rain Water Harvesting within their premises, provide Waste Management and environment improvement measures to ensure a sustainable Green Campus, strive to have a plastic free environment, start Installation of grid connected solar rooftops/ Power Systems, wherever feasible.
- 4. Institutions to preferably Implement Unnat Bharat Abhiyan. Under the Unnat Bharat Abhiyan, AICTE has the objective to build institutional

capacity in institutes of Higher Education in research and training, relevant to national needs, especially those of rural India, which includes inter alia the following objectives:

- Encourage Indian higher education Institutions to engage with problems of rural India and to provide solutions for them.
- Develop an academic framework for working on societal problems, their solution, delivery, reporting and assessment.
- Re-visit where necessary the curriculum in technical education in educational and research institutions to incorporate inclusive technologies for rural India.
- Promote inter-disciplinary approach in higher education guided by live contexts.
- Develop over time, research areas which have developmental significance, such as drinking water, education, health, agricultural practices, electrification, agricultural and rural industries cooking energy, watershed analysis.
- Develop collaborations of academic institutions with key government flagship programs and develop formal course-ware for supporting the knowledge needs for the same.
- Promote networking and coordination among various science and technology based voluntary organizations and developmental agencies.
- Foster collaborations between governance, knowledge institutions and local communities.
- Provide rural India with professional resource support from institutes of higher education, especially those that have acquired academic excellence in the field of science, engineering and technology, and management.
- To identify the basic developmental and productive needs of a village and find ways and means to meet these needs.
- Strengthen the technical design of interventions in key sectoral areas of natural resource management such as water and soil, economic activities such as agriculture and related production, or related to crafts and artisans, infrastructure such as housing, roads, energy.
- Identify efficient, cost effective and sustainable development practices in the field. Help grassroots organizations in innovating new products, and support rural entrepreneurs to develop neighborhood solutions.
- Empower communities to dialogue with knowledge institutions in order to evolve technically sound and locally feasible development strategies that promote self-reliance.
- Facilitate convergence of development schemes, resources, various planning and implementation initiatives, and coordination of agencies for successful interventions and measurable outcomes.



- 5. Implement funding schemes for activities such as Unnat Bharat Abhiyan, Jal Shakti Abhiyan etc. to encourage the environmental initiatives
- 6. Promote schemes by MHRD on environment in institutions such as one student, one tree etc.
- 7. Encourage internal policies such as making premises plastic free, replacing mementoes with plants, building applications on environmental conservation, sustainable development etc.
- 8. Facilitate recognition and protection of rights of owners of traditional knowledge and intellectual property, while promoting research
- 9. To promote collaboration and networking among various Science and Technology organizations, Educational Institutions and Manufacturing organizations/ Development Agencies, with focused discussions on Environment Management.
- 10. Design technical interventions for natural resource management and economic activities like agriculture and related activities, infrastructure like housing, roads, energy, which affect the environment

## **Institutional Approval Process**

- 1. Annual Approval Process to include the sustainable development goals
- 2. The Approval Handbook every year to ensure that institutions meet the requirements environment policy requirements of AICTE
- 3. Ensure that during inspections, institutions are working under the ISO 14001 guidelines and there are no activities that may cause environmental hazards, including laboratories and workshops
- 4. Ensure that environment, health and safety standards that meet the requirement of relevant laws, regulations and codes of practice are implemented in institutions





- 1. Institutions not complying with the mandatory policy aspects will face issues in getting approvals as environmental conservation and Harmony with Nature are important aspects of value education
- 2. Institutions performing well in environmental policy matters will get rewarded for their projects and initiatives
- 3. Students devoting time to these activities will earn credit hours that are mandatory for earning their degree
- 4. Students with environmental innovations and startups will get recognition and awards
- 5. Mandatory participation in AICTE initiatives like one student, one tree or similar initiatives, as announced by AICTE from time to time
- 6. New initiatives in the right direction will be encouraged





#### **AICTE Sustainability Initiatives**

AICTE performs no activities that causes emissions in the environment. AICTE envision that the engineers graduating from the affiliating institutions are made responsible citizens of the world and are responsible towards environmental concerns.

- 1. AICTE through its Approval Process handbook mandates environment improvement measures, Green Campus, Waste Management, Rain Water Harvesting and Sewage Disposal System in all 9672 technical institutes which are approved by AICTE
- 2. AICTE promotes use of environment improvement measures, Green energy ie. solar rooftops/ Power Systems, Plastic Free Campus, Rain Water Harvesting, Waste Management in all institutions through annual approval process.
- 3. AICTE implements a one student, one tree initiative every year during the month of July and August under which students are required to plant one tree during the event. Every student takes care of the tree planted by themselves and builds the environment.
- 4. The Jal Shakti Abhiyan, built in collaboration with Principal Scientific Advisor of India, intends to mobilize 30,000 students to provide local solutions to rising issues of conservation of water resources in selected districts based on the Bhuvan application developed by ISRO.
- 5. Clean and Smart Campus award aims to seek engagement with all stakeholders, primarily the student community to draw their attention towards immense scope and potential that the Technology offers for abstract objectives such as cleanliness, sustainability, environment etc.

#### Impact of AICTE Sustainability Initiatives

#### One Student One Tree

As an incentive for carrying out plantation, Student were awarded 20 "AICTE Activity Point" as defined in Chapter 6 of AICTE Internship Policy.

One exclusive portal was developed by students, so that institutions can submit the data of planted trees along with one picture of plantation drive (preferably group of students with the saplings) on the portal.

All Faculty Members, Staff, Administration and Management of the Institutions were also requested to lead by example, by planting at least one tree themselves. More than 30 lakh trees have been planted till 2019. AICTE is committed to take it further and reach the target of 1 crore tree plantation.

#### Jal Shakti Abhiyan

The Jal Shakti Abhiyan is aimed to accelerate water harvesting, conservation and bore well recharge activities in 256 water-stressed districts.

AICTE has mapped more than 40000 engineering students with the District administration so that these students can work under JAL Shakti Abhiyan activities in their respective blocks. Most of the student participation is from the state of Tamil Nadu which is most hit due to present water crises.

The PSAs office in close coordination with the ACTE is mobilising 40,000 students referred to as Jal Vigyan Swayamsevaks from around the country in order to support the officials visiting their designated blocks. The students play key role in supporting teams in data collection for planning, triangulating data and findings and supporting research and development efforts for future interventions.

Students of KCES' College of Engineering and Information Technology Jalgaon with the help of District administration have undertaken a project for revival of age-old traditional village pond. The Village Chinchkheda SIM, Tehsil Bodwad, District Jalgaon in Maharashtra was severely affected by water scarcity over a decade. Firstly, the institution /organization imparted series of trainings on technical, social and managerial aspect of the program in the village and as a result the community got involved in all aspects and owned the program and completed the work in just 45 days. The outcome of the work done is the village became water sustainable.

Students of Civil Engineering Department of D. Y. Patil College of Engineering, Akurdi, Pune with the guidance of Dy. Collector selected Purandar Tehsil for water conservation activities. 34 students participated in the various Water conservation and awareness creation activities

#### Clean and Green Campus Awards

AICTE had launched the "Clean Campus Award" in the year 2017. In 2019, it is renamed the "CLEAN AND SMART CAMPUS AWARD 2019", to recognise the efforts of the institutes and its stake holders for attaining the intended objectives of cleanliness and smartness.

The main objective of this award is not only to bring attention of the students, faculty and institutions towards the Swachh Bharat Abhiyaan but also to realize them that how smartly they can reduce the consumption or exploitation of natural resources such as paper, water, energy by deployment of digital technology. Other aspects such as effective waste management, sustainable transport, air pollution etc can also be achieved by 'smart' use of technologies

The details of the application submitted under CSCA' 2019 are as un

	Applications Registered	Applications Submitted	Shortlisted for Expert Visit	Final Selection / Winners
A Alle	1540	739	36	11 Winners (University -3, Polytechnic 4 & College- 4)

11 institutions in 3 categories were selected for the Awards and 13 institutions were selected for following Best Practices in their institutions for their cleanness and smartness.

#### **Outcome**

- 1. Approximately 80 lakh students are studying in AICTE approve institutions, 5.6 lakh faculty members and 9672 institutions are directly impacted through AICTE's initiatives.
- 2. These students affect equal number of organizations and show concern towards environmental issues
- 3. Engineering contributes to 60% of exports in India and the GDP of Industry contributes 23% of GDP. The contribution from Industry is ranked 6<sup>th</sup> in the world according to the Ministry of Statistics and Programme Implementation 2018-19

