

Criterion VII – Institutional Values and Best Practices (100)

Key Indicator - 7.1 Institutional Values and Social Responsibilities (50)

<p>7.1.6</p> <p>QnM</p>	<p>Quality audits on environment and energy are regularly undertaken by the institution (5)</p> <p>7.1.7.1. The institutional environment and energy initiatives are confirmed through the following</p> <p>1.Green audit <input type="checkbox"/></p> <p>2. Energy audit <input type="checkbox"/></p> <p>3.Environment audit <input type="checkbox"/></p> <p>4.Clean and green campus recognitions/awards <input type="checkbox"/></p> <p>5. Beyond the campus environmental promotional activities <input type="checkbox"/></p> <p>Options:</p> <p>A. Any 4 or all of the above</p> <p>B. 3 of the above</p> <p>C. 2 of the above</p> <p>D.1of the above</p> <p>E. None of the above</p> <p>Upload:</p> <ul style="list-style-type: none">• Reports on environment and energy audits submitted by the auditing agency• Certification by the auditing agency• Certificates of the awards received• Any other relevant information	<p>5</p>
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Certificate of Registration

GMCSPL hereby certify that the organization

SAMSKRUTI COLLEGE OF ENGINEERING AND TECHNOLOGY

Kondapur (V), Ghatkesar (M), Medchal (D),
Hyderabad-501301, Telangana State, India.

Has established and applies a Environmental Management System in accordance with

ISO 14001:2015

For the scope of activities :

Provision of Technical and Management Education Services Leading to Award of
Diploma Programs, Under Graduate Programs & Post Graduate Programs in
Engineering and Master of Business Administration (MBA).

230603-E

Certificate Number

15 June 2023

Date of Last Issue

15 June 2023

Date of Initial Registration

14 June 2024

Date of Audit Due



Certificate is Valid for 3 Years (15.06.2023 to 14.06.2026) From the
Date of Initial Registration. Upon Successful Completion of Surveillance
Audit New Certificate With an Extended Validity will be issued.

A handwritten signature in black ink, appearing to read "Lesang".

Signed on behalf of GMCSPL

Global Management Certification Services Pvt.Ltd.

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ISO 50001:2018

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GREEN AUDIT REPORT

2023-2024



Samskruti College of Engineering & Technology
Kondapur, Ghatkesar, Telangana

Accredited by NAAC

Green Audit Assessment Team




K.Siva Naga Prasad, Lead Auditor EMS/EnMS




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INTRODUCTION

INTRODUCTION

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of institute. It aims to analyze environmental practices within and outside of the concerned place, which will have an impact on the eco-friendly atmosphere. Green audit is an important process for any college or institution to determine how and where they are using the most energy or water or other resources; based on which the college can then consider how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. It provides the staff and students a better understanding of Green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it can also be stated that institutional self-enquiry is a natural and necessary outgrowth of any quality educational institution. Thus it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is becoming more prevalent.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO₂ from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through carbon foot print reduction measures.

OBJECTIVES

OBJECTIVES

In recent time, the Green Audit of an institution has been becoming a paramount importance for self- assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep our environment clean since its inception. Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green audit are:

- To map the geographical location of the institution.
- To document the floral and faunal diversity of the college.
- To record the meteorological parameter of SCET where the college is situated.
- To document the ambient environmental condition of weather, air, water and noise of the college.
- To document the waste disposal system.
- To estimate the Energy requirements of the college.
- To report the expenditure on green initiatives during the last five years.

METHODOLOGY

METHODOLOGY

The purpose of the green audit of SCET is to ensure that the practices followed in the campus are in accordance with the Green Policy of the country.

The methodology includes:

- collection of dataP
- Physical inspection of the campus
- Observation
- Review of the documentation
- Data analysis.

ABOUT THE COLLEGE

ABOUT THE COLLEGE

Founded in 2005 by st.Vincent Educational Society, Samskruti College of Engineering and Technology represents a rich tradition of excellence in technology-based education. A premier-league institution among the affiliates of JNTUH University, Accredited NAAC with 'A' Grade.

Samskruti Engineering, Polytechnic, Pharmacy and Business Management Institutions are located in pollution free environment and natural surroundings at Kondapur Village, Ghatkesar Mandal, Medchal Dist (old Ranga Reddy Dist). It is 1 Kilometer away from the Hyderabad-Warangal highway near by Ghatkesar and 18 kms from Secunderabad/Hyderabad and connected by TSRTC Bus Routes from various prominent localities of Twin Cities.

Samskruti College of Engineering and Technology, in its 14 years of existence, is a reputed institution in the State of Telangana. The College follows the University norms and has required number of faculty in both ratio and cadre wise. Samskruti College of Engineering and Technology has emerged into a center of excellence in engineering education.

Programmes offered by the institution

S.NO	Programme Code	Programme Name
01	01	Civil Engineering
02	02	Electrical and Electronics Engineering
03	03	Mechanical Engineering
04	04	Electronics and Communication Engineering
05	05	Computer Science and Engineering
06	06	CSE(Artificial Intelligence & Machine Learning)
07	07	CSE (Data Science)

VISION AND MISSION STATEMENTS

Vision

- To be center of excellence by redefining engineering education and nurture globally competent engineers.
- To empower the faculty and students with knowledge, skills and innovative thinking to facilitate discovery in numerous existing and globally professionals as essence of noble values.

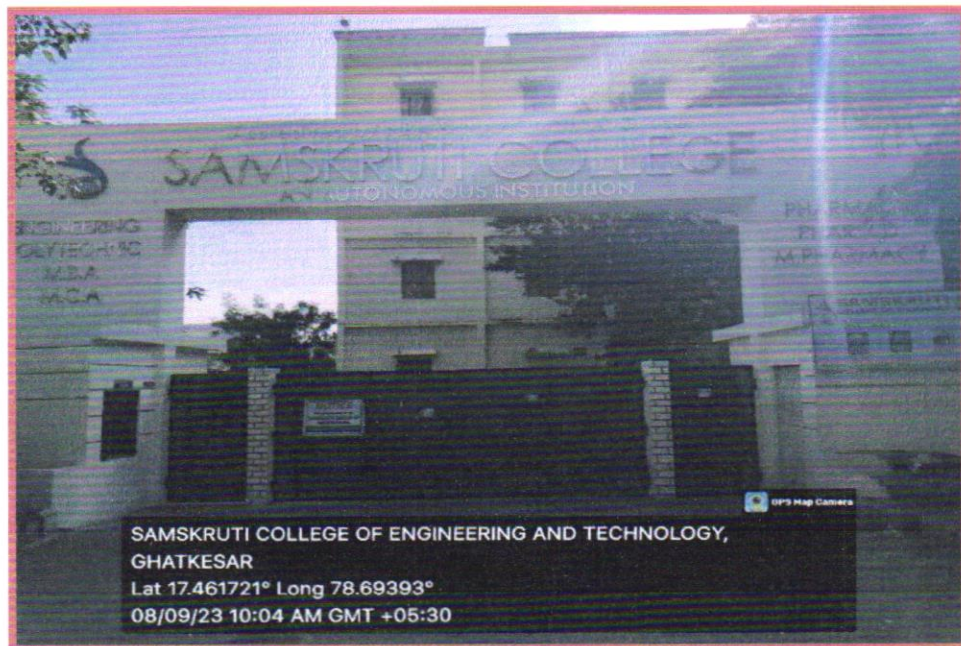
Mission

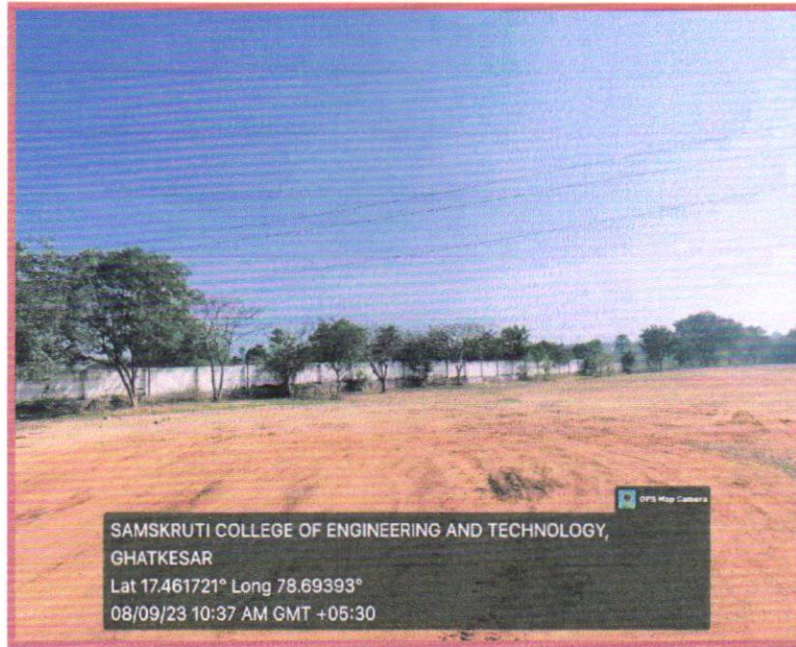
- To train and develop students into professional engineers so as to fulfill the industrial and community needs. To shoulder the responsibility of reducing the suffering mankind by providing advanced technology.
- To maintain high values and standards so as to make students technologically competent, ethically sound and socially committed professionals by providing a vibrant learning ambience for the welfare of society.

GREEN AUDITING

GREEN AUDITING

Samskruti College of Engineering & Technology has been taken several initiatives to transform the college as “Green Campus” and adopted the ‘Green Campus’ system for environmental conservation in order to achieve environmental sustainability. The institute has initiated and planted variety of plant species to encourage and enhance the Biodiversity aspect of the campus. Due the Green initiative adopted by the institute, the campus temperatures were reduced and contributes on the adverse impacts of Global warming. The Students are enabled to pursue their engineering higher education comfortably at Green Campus and eco-friendly study environment. Rainwater harvesting system was implemented to meet the needs for plantation.





The solid waste will be collected from all the sources such as from Kitchen, bathrooms inside the canteen which includes papers, plastics, foods, metals, glass etc. and it will be segregated from source of generation. The administrative supervisor in each block ensures that the waste in each floor is collected at designated time intervals. The block workers in each floor collect, clean, segregate and compile the waste in the dustbins provided at each floor. The floor dustbins are emptied in movable containers provided for each block and is taken to the dumping yard provided by the college. The college has contacted an authorized vendor who collects the waste from the designated place, segregates them, recycles them and disposes them at the landfills authorized by the government. For drinking, mineral water facility is arranged in every building of the campus. Wastage of drinking water is restricted through proper monitoring. Waste water is properly drained out to maintain the greenery in the campus as well as providing ecologically aesthetic environment. Proper drainage system is arranged for all the buildings of the campus. Awareness towards minimizing the wastage of water is spread at regular intervals among the students.

The college was located in 5.2 acres of land area. The three major pillars i.e. zero environmental foot print, positive impact on occupant health and performance and 100% graduates demonstrating environmental literacy. The goal is to reduce CO₂emission, energy and water use, while creating atmosphere where students can learn and be healthy.

LAND USE ANALYSIS OF SCET

LAND USE ANALYSIS, SCOP

GENERAL OVERVIEW OF THE CONCEPT OF LAND USE

Land use refers to man's activities and the various uses which are carried on and derived from land. Viewing the earth from space, it is now very crucial in man's activities on natural resource. In situations of rapid changes in land use, observations of the Earth from space give the information of human activities and utilization of the landscape.

Remote sensing GIS techniques are now providing new tools for advanced land use mapping and planning. The collection of remotely sensed data facilitates the synoptic analyses of earth system, functions, patterning and change in the local, regional as well as at global scales over time. Satellite imagery particularly is a valuable tool for generating land use map.

METHODOLOGY ADOPTED FOR LAND USE MAPPING

Three types of data that are GPS points, field survey data and Google earth data for geo referencing have been used in this study.

DATA PROCESSING AND ANALYSIS

Land use map preparation is executed through the following steps:

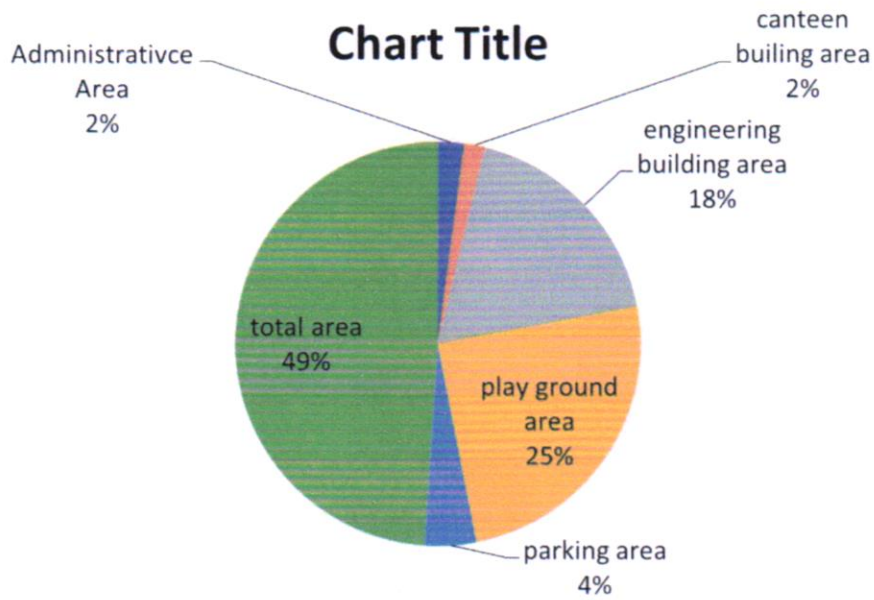
Acquisition of data (latitude and longitudinal data) Geo-coding and Geo referencing of satellite imageries by extracting the ground control points. Supervised classification was carried out with the aid of ground truth data collected during field survey. Scanning and digitization of maps and editing of all the Geo referenced maps were done using GIS. Data manipulation and analysis and linking the spatial data with the attribute data for creation of topology was carried out using GIS software. Creation of GIS output in the form of land use map showing various land usage have also been prepared.

Therefore, attempt has been made in this study to map land use for SCET with a view to detect the land consumption in the built-up land area using both remote sensing and GIS techniques.

LAND USE DATA OF SCET, Ghatkesar

Canteen Building Area	AREA (sq.meter)
Administrative Area (Inside the engineering Building)	500
Canteen Building Area	400
Engineering Building Area	4456
Play ground Area	6070.28
Parking Area	1000
Total Area	11,926.28

LAND USE ANALYSIS, Samskruti College of Engineering, Ghatkesar, Hyderabad



LAND USE (BUILT UP AREA) ANALYSIS

The built up area of 40 % (4456 m 25%) consists of the following regions as stated below for land consumption in built-up area for Samskruti College of Engineering.

FINDINGS

SCET, which was established in the year 2006, has an eco-friendly environment. It has a long legacy of healthy environmental practices including periodic plantation, their preservation and maintenance. Its land use is such that about 60% of the total area is occupied by open land and plantation that generates a better and sustainable campus environment.

*Area occupied by various buildings of SCET***Instructional Area Details**

Building/Blocks Name	Level/Floor No.	Room No.	Measurements of room (in Sq.mts.)			
			Length	Breadth	Height	Area (L*b)
SCET	0	G03	7.5	9.15	3.66	68.625
SCET	1	101	7.5	9.15	3.66	68.625
SCET	1	102	7.5	9.15	3.66	68.625
SCET	1	113	3.58	9.15	3.66	32.757
SCET	1	114	7.5	9.15	3.66	68.625
SCET	1	115	7.5	9.15	3.66	68.625
SCET	1	117	3.58	9.15	3.66	32.757
SCET	1	119	3.58	9.15	3.66	32.757
SCET	2	202	3.58	9.15	3.66	32.757
SCET	2	204	3.58	9.15	3.66	32.757
SCET	2	205	3.58	9.15	3.66	32.575
SCET	2	206	7.5	9.15	3.66	68.625
SCET	2	207	15.0	9.15	3.66	137.25
SCET	2	208	3.58	9.15	3.66	32.757
SCET	2	210	7.5	9.15	3.66	68.625
SCET	2	211	3.58	9.15	3.66	32.757
SCET	2	213	3.58	9.15	3.66	32.757
SCET	2	217	3.58	9.15	3.66	32.757
SCET	3	302	3.58	9.15	3.66	32.757
SCET	3	306	3.58	9.15	3.66	32.757
SCET	3	307	3.58	9.15	3.66	32.757
SCET	3	309	3.58	9.15	3.66	32.757
SCET	3	310	3.58	9.15	3.66	32.757
SCET	3	314	3.58	9.15	3.66	32.757
SCET	3	316	3.58	9.15	3.66	32.757
SCET	3	317	3.58	9.15	3.66	32.757
SCET	3	318	3.58	9.15	3.66	32.757
SCET	3	321	3.58	9.15	3.66	32.757
SCET	3	322	3.58	9.15	3.66	32.757
Canteen Building	2	201	3.58	9.15	3.66	32.757
Canteen Building	2	202	3.58	9.15	3.66	32.757
Canteen Building	2	203	3.58	9.15	3.66	32.757
Canteen Building	2	204	3.58	9.15	3.66	32.757
Canteen Building	2	205	3.58	9.15	3.66	32.757
Canteen Building		207	3.58	9.15	3.66	32.757