VISION 2030

A STRATEGIC PLAN FOR EMERGENCE AS A LEADER IN TECHNICAL EDUCATION

EDUCATION IS DEDICATION

SAHRDAYA
College of Engineering & Technology
Kodakara - Thrissur - 680684

JANUARY 2021

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"First, have a definite, clear practical ideal; a goal, an objective. Second, have the necessary means to achieve your ends; wisdom, money, materials, and methods. Third, adjust all your means to that end"

-Aristotle

"To accomplish great things we must first dream, then visualize, then plan…believe…act!"

(Alfred A. Montapert)

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Sahrdaya College of Engineering & Technology

(Established in 2002 under Irinjalakuda Diocesan Educational Trust)

Our Vision

Evolve as a leading technology institute to create high caliber leaders and innovators of global standing with strong ethical values to serve the industry and society.

Our Mission

- Provide quality technical education that transforms students to be knowledgeable, skilled, innovative and entrepreneurial professionals.
- Collaborate with academia and industry around the globe, to strengthen the education and research ecosystem.
- Practice and promote high standards of professional ethics, good discipline, high integrity and social accountability with a passion for holistic excellence.

Sahrdaya College of Engineering & Technology

(Established in 2002 under Irinjalakuda Diocesan Educational Trust)

Our Quality Policy

We at Sahrdaya, are committed to provide Quality Technical Education through continuous improvement and by inculcating Moral & Ethical values to mold into Vibrant Engineers with high Professional Standards.

We impart the best education through the support of competent & dedicated faculties, excellent infrastructure and collaboration with industries to create ambience of excellence.

Our Motto

Education is Dedication

Our Guiding Principle

We promote Character, the rest follows…

PREAMBLE

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Twenty-first century started with new challenges for humanity. Science and Technology has its strengths derived from the pursuits of innumerable scientists and engineers of the past. But, the expansive growth of population and the fast depletion of natural resources raise challenges hitherto unknown to the world *per se*. On one side, we need development that provides a free world with all needs within the affordable limits and reach of all, while on the other hand, inclusiveness and sustainable growth are increasingly falling prey to development activities.

Education will empower human beings to make use of the opportunities for employment, and secular education will make the members of the society more inclusive in partnering with the people around the world in the development process. Research built on and pursuant to higher education can address the variety of issues in the chain of development. Since the developmental goals are changing faster and ever more dynamically at present, the institutions of higher learning have to constantly engage in dialogues with all the stakeholders and the community at large in order to be persistent in revamping their goals, objectives and the plans in a strategic manner.

The Union Cabinet has approved National Education Policy (NEP 2020) in July 2020 bringing major reforms in higher education. NEP is a comprehensive framework to guide the development of education in the country. The new education system can prove to be a turning stone in the times to come. The major aim of introducing and implementing the NEP is to enhance the quality of education equally for all and to move in the direction of strengthening India as a global superpower.

Aspects such as widening the availability of scholarships, strengthening infrastructure for Open and Distance Learning, Online Education and increasing the usage of technology have received great attention in the NEP. These are vital reforms for the education sector. The policy also proposes phasing out of all institutions offering single streams and that all universities and colleges must aim to become multidisciplinary by 2040.

Sahrdaya College of Engineering & Technology, with its humble beginning in 2002, has gone through the two decades of its existence and is always on the lookout for the ways and means of strengthening its infrastructure and processes to face the new challenges that are emerging. The institute wants to be a destination

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for higher education and never wants any stone to be unturned in its pursuit for excellence in all spheres of activities and targets.

VISION 2030 is the result of an exercise done recently by the institution, drawn through a team effort, to put together the thoughts and action plans for a decade ahead, to initiate such actions deemed decisive to build more on its strengths and enrich more on its values.

Being a self-financing College, the dreams will take shape only with a proactive support of all the stakeholders as well as the Government. For an institution of our kind, the stakes of the industry and alumni need to be utilized effectively in the institutional development on a mutually beneficial work-plan,. This document is being submitted with all hopes and expectations.

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A STRATEGIC PLAN FOR EMERGENCE AS A LEADER IN TECHNICAL EDUCATION

EXECUTIVE SUMMARY

The Vision Document, **VISION 2030- A STRATEGIC PLAN FOR EMERGENCE AS A LEADER IN TECHNICAL EDUCATION** seeks to affirmatively present the important dream of Sahrdaya College of Engineering & Technology to be one among the leaders in education that can provide truly distinctive educational experience and a rewarding career. The strategic plan is being drawn to lay down an action plan to strengthen all spheres of activities for taking the institution forward in its journey for academic and research excellence, leveraging on the experience from its pursuits in the last two decades, by suitably and affirmatively networking with the alumni, industry, institutions within the country and across the world and the community at large.

The Plan has been drawn by keeping all the stakeholders in perspective. The institution wants a renewed focus on students to make them more innovative through an outstanding learning experience. The institution wants the members of its faculty to transcend the boundaries of their disciplines and share the research eco system to work on transformational technologies that have the potential to address the societal challenges faced in India today, and the world across, where science and technology can be of great use. Focus will be specifically given for research and skill development in areas such as biotechnology, biomedical, energy/power, healthcare, housing, informatics, and education. The effort shall be to continue to provide impetus to research, to enhance the quality and quantity of research output through an increase in research intensity, strengthening of the members of the faculty, better Ph.D. student enrolment, improved infrastructure, engagement with industry and many

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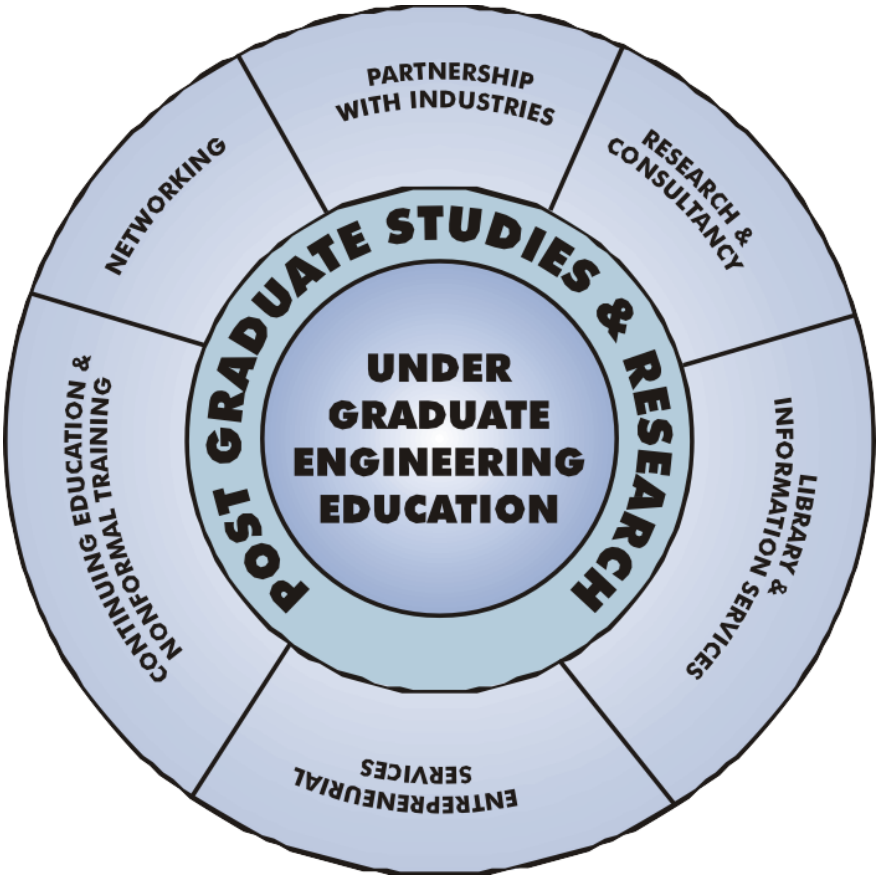
worthwhile international collaborations in sponsored research. The institute wishes to have vibrancy in channelizing innovations to the start-ups to enable continuous value addition to the society.

The contributions of Sahrdaya College of Engineering & Technology to the business incubation is picking up fast. The college is a successful mentor of more than 5 tiny startups, making them stand on their own feet and creating several man-days of work. The dream for a Research Park is kept close to our hearts because we feel that such an environment will help us stretch our wings for building an incubation eco system in the locality and would seamlessly connect members of our faculty to the community enabling entrepreneurship and value creation in the years to come by utilizing the research and innovations not only in SCET,but in the neighboring academic institutions also. Our students will also embrace the entrepreneurship culture. The change envisaged is translational and transformational. The institution will be having industry-relevant academic programmes and excellent research facilities in due course. The institution will try to attain University status in 10 years time from now, as envisaged in NEP.

Organizational Perspective

In a leading education institution of our kind imparting education and training in areas of science, technology, engineering, the academic, research, and networking activities and the facilities such as library, constitute a macro-model of the total system of the Institute. The core of the macro model is the undergraduate education in engineering & applied sciences which will produce the highly qualified graduate engineers who are internationally competent. The postgraduate programmes are the processes that produce specialized human resources as researchers, faculty, and managers. The new knowledge produced in the research would enrich the undergraduate education. Similarly, the service activities around the periphery such as, research, consultancy, continuing education, entrepreneurship, incubation, and startup are the radiating benefits flowing out from the institute due to its inner strengths. Following figure presents the organizational model encompassing these factors.



A STRATEGIC PLAN FOR EMERGENCE AS A LEADER IN TECHNICAL EDUCATION

1. INSTITUTIONAL BACKGROUND

Sahrdaya College of Engineering & Technology (hereinafter referred to as SCET) was established in the year 2002 under Irinjalakuda Diocesan Educational Trust at Kodakara, Thrissur. The trust belongs to the Catholic Diocese of Irinjalakuda, a Christian (Syro-Malabar) minority community. The Registered Office of the Trust is located at Catholic Bishop's House, Irinjalakuda – 680121. The college has completed almost two decades in its functioning and has proven its excellence and achieved First Rank in pass percentage among all the Engineering colleges in the Kerala state, consistently for five consecutive years, under the University of Calicut. The 2015 -2019 batch is the first batch under KTU and has secured 14th rank in pass percentage among 143 Engineering colleges. The environment in Sahrdaya paves way for an ideal learning ambience, providing exposure to different cultures and perspectives for fruitful and meaningful interactions. The inspired mindset of Sahrdaya helps to provide quality education and inculcate human values in students to embrace new challenges and seize new opportunities. Over 1800 student population and 200 plus faculty/ staff represent a cross-section of the state's demographic spectrum cutting across barriers of religion, caste, creed and gender.

The Campus is nestled in a wooded valley of 45 acres (18.2 hectares) end to end with landscaped expanses, breezy shadowy meadows, and crystal-clear water bodies of varying sizes and shapes. The campus has its aesthetically planted orchards of Fruit laden trees and a well-maintained Herbal Garden

Now SCET offers 6 academic programmes at the undergraduate degree level and 3 at the postgraduate degree level, along with Ph.D level research in 3 departments.

The various Departments in SCET are:

- Biomedical Engineering
- Biotechnology
- Civil Engineering
- Computer Science & Engineering
- Electrical & Electronics Engineering
- Electronics & Communication Engineering

Other than the Engineering departments, SCET has an Applied Science and Humanities department also. With the launching of NEP, our vision and Mission had also gone through a transformational change. The College is slowly expanding the horizon from teaching to teaching and research in order to embrace the cutting-edge areas such as biotechnology, biomedical, information security, Internet of things, Robotics and so on. SCET envisages its growth as a multi-disciplinary university that offers equal opportunities to all people, that combines all the efforts to collaborate with the leading educational institutions across the world while joining hands with the industry and service sectors in India to train the best talents of the aspirants.

2. AIM

The momentum of economic and social developments is steadily increasing. Knowledge is available at all times and across the world and new information and insights are developing at an ever faster pace. Our aim is to become a truly high performing institution of higher education that provides distinctive learning experience and professional development for the students and a rewarding research experience for those who want to pursue research; to be a good employer, a nodal centre for R&D, and a hotspot for networking with our alumni. So, our development will focus on various target groups as enlisted below:

Table - Development focus

Sl. No	Target	Development Focus
1	Student	Distinctive educational experience and a benefitting career path
2	Community	Reach out to render support in the sustainable development process where science &technology shall be an enabler
3	Industry	Constant interaction with SMEs and industries in addressing the research issues and operational problems
4	Incubation	Enabling support for startups and Research Park micro-entrepreneurs
5	R&D	Exposing the student and the members of its faculty to cutting edge and emerging technologies, and social needs in order to enhance their creativity and innovation
6	Alumni	Rewarding collaborative and cooperative moves for mutual benefit

3. STRATEGIES

We shall strive to further improving our quality by various means, including:

- Promoting student learning and research
- Further developing our national and international profile
- Promoting global citizenship
- Establishing networks
- Working with industries and start-ups
- Engaging with alumni
- Building environment for enriching career paths for faculty & staff
- Employee enriching career experience and a sustained professional development

4. COURSES OF ACTION

The following courses of action would provide SCET with a unifying sense of purpose and direction.

- It should work towards attaining national and international recognition among

peer institutions for excellence in both research and teaching. It should be committed unwaveringly to academic excellence, engagement and discipline.

- It should assemble a dynamic body of faculty who exemplify excellence and innovation in the pursuit and delivery of knowledge and will perpetuate the highest standards of education for future generations. It should be open to academics irrespective of gender, caste, ethnic origin, nationality, religion and ideology.
- It should maintain a collegial, supportive, and diverse environment that encourages its students, faculty and staff to achieve the best of their abilities.
- It should develop technology with human face for maintaining and advancing the growth of the country.
- It should play a vital role in making the Indian economy a knowledge economy. It should be capable of analyzing the state of the existing knowledge and its future perspectives and thereby capable of creating new knowledge by assimilating the knowledge that are being created all over the globe. It should produce innovators and creators of knowledge. Growth of economy and lifestyles of civilized societies are being increasingly determined by knowledge and innovation created and nurtured by knowledge institutions. It should look for closer interaction between itself, communities and industries to create national wealth and enhance competitiveness of national economy and thereby, promoting regional and local development.
- It should partner with academic, industrial and government entities that share and enhance its mission, so that the educational and collaborative efforts result in a maximum, positive, economic impact.
- It should build, develop and maintain an enduring, world-spanning network of alumni and facilitate permanent use of the network for international and national collaborations.

5. STRATEGIC PLAN FOR 2021-2030

Five major dimensions for the development plan are:

1. Interdisciplinary undergraduate and postgraduate academic programmes, having high content of research to match with the industrial needs and the national mission of self-sufficiency in science and technology; strengthening of existing programmes undertaken side by side. Provide state-of-art facilities to accomplish cutting edge research in the frontier areas of, science, technology, engineering and management; start a Facilitation centre for faculty development in engineering education.
2. Globally connected research and development activities with social and industrial relevance to support the needs of the nation in terms of innovation in knowledge, products and processes.

3. National and international networking with both academia and industry to enable the exchange of best practices and ideas in the global knowledge society.

4. Social and community outreach using new developments in science and technology for empowerment of various sections of the society.

6. ACADEMIC PLAN

It is felt that the institution should have educational programmes to promote

i) Fundamental understanding of basic and applied sciences

ii) Capacity to understand advanced work, and

iii) Imagination and intellectual capacity

A. It should follow 'learning to learn' approach so that the students are

i) Ready to learn in any context and at any age

ii) Able to tailor their approaches to learning in different contexts, appropriate to their individual needs and strengths

iii) Confident about learning something new

iv) Able to undertake independent learning

v) Able to learn from others and undertake effective collaborative learning

In other words, SCET should give emphasis on 'how' they learn (process) in addition to 'what' they learn (content).

B. It should have a delivery of education that enables its students to face the following challenges:

i) Proliferating information

ii) Multidisciplinary technological development

iii) Rapid changes in technology

iv) Globalized market

v) Endangered environment

vi) Emerging social responsibilities

C. It should provide students with the fundamental knowledge, interdisciplinary problem-solving skills, societal and business awareness, and confidence required to excel in their chosen professions.

D. It should give emphasis on the development of cross-cultural attributes of students for global job market. Hence, we look back and analyze our strengths and weaknesses with a view to enhance our strengths and remove the weaknesses.

From our humble beginning with three progammes in2002,

Our present strengths are:

- ❖ **2f Status**: Recognition of College under Section 2 (f) of the UGC Act, 1956
- ❖**NAAC** Accredited (2015 to 2020)
- ❖**ISO 9001: 2015** Certified
- ❖**DSIR Recognised** SIRO
- ❖Accredited by **Institution of Engineers (India)**
- ❖**P**roject **B**ased **L**earning Approach
- ❖**O**utcome **B**ased **E**ducation practiced from 2017 onwards
- ❖Sahrdaya Technology Business Incubator (S**TBI**)
- ❖Innovation and Entrepreneurship Development Center (**IEDC**)
- ❖Centre for **IoT and Robotics** Research

However, successful implementation of the above reforms and sustaining thequalityofacademicprocessesareconstrainedbythefollowingaspects:

1. Absence of multidisciplinary and industry oriented programmes
2. Limited facilities for industry linked research
3. Affiliation to the University, which limits updation of syllabus, floating of new electives and rigid curriculum
4. Weak collaboration with international institutions and research centres

Academic autonomy status is the immediate requirement to solve the limitations with respect to the rigid curriculum.

After getting academic autonomy, we will have plans to revamp the syllabus to bring in contents that are multidisciplinary in nature to enrich the existing programmes. It is expected that these programmes would then give an added impetus to the 'Make in India' initiative of the Government of India.

To bring in effective participation from the vast alumni base and the industry, active participation of alumni/industry in designing the curriculum, syllabi, promoting R&D network and offering better placement to the students, in addition to better industrial collaboration, are also kept in our perspective.

To promote high quality research and generate more patents and copyrights, we have already initiated Faculty Research Seed –Money Grant Scheme from 2019 onwards.

As on today, 21 numbers of research grants are sanctioned in SCET and 45 faculty members are actively participating in this research schemes.

7. RESEARCH PLAN

To collaborate with academia and industry around the globe, to strengthen the education and research ecosystem, is part of our Mission. Towards achieving this mission, the plans envisaged are:

1. Develop state-of-art research facilities to perform cutting edge research in the frontier areas of science, technology, and engineering.
2. Attract young talented brains to enrich our proficiency, create new knowledge and innovation, and mobilize that knowledge and research innovation for social and economic benefit of the community/nation.

Hence, the Research Plan of SCET shall imperatively be providing for a strategic road-map for its excellence in research and development, utilizing its infrastructure and core competencies. There are also active collaborations with scientists from premier institutes in India and abroad. These are supported through several MoUs. There needs to be further acceleration for the R&D growth for innovation, suitable for implementation either in industry or for social benevolence. The role of members of the faculty in consultancy services to industries and government agencies needs to be supported by infrastructure and the high quality technical personnel.

The laboratories are well equipped but the expansion in user base and diversity in facilities needed are calling for significant investment in capacity expansion and day to day management.

Modernization of Laboratories of Existing Disciplines

The existing laboratories need updating and strengthening to bring in more sophistication, like digital tools, interfacing with the network through IoTs, etc. Obsolescence has to be rooted out. Hence, each department shall embark on a modernization drive to make state-of-the art facilities in the department laboratories. The focus shall be on the development of personnel and expertise in the areas of sustainable development, smart cities, data analytics, smart grid, information security and soon.

Establishing New Research Centres

We propose specially focused Research Centres in specific areas. These are expected to be acting as the nodal centres for multi-disciplinary collaboration for focused research by members of the faculties and students. We envisage few centres in the coming 15 years' time. The tentative list is as given below. These have been identified based on in- house competencies. These can be started only if the institution is provided with the resources by the government or other agencies in due course of time. At least five of them will be started by around2030.

1. Centre for Technology Development and Planning for Smart Living
2. Centre for Environmental Forensics
3. Centre for Socio-technical Research and Industrial Support

4. Centre of Rehabilitation and Bio-signal Research
5. Center for Bio-processing, Bio-computing and Biomedical Research
6. Centre for Security and Privacy Technologies
7. Research Innovation Hub in Intelligent Robotics and Automation
8. Centre for Smart Grid and Sustainable Energy Systems

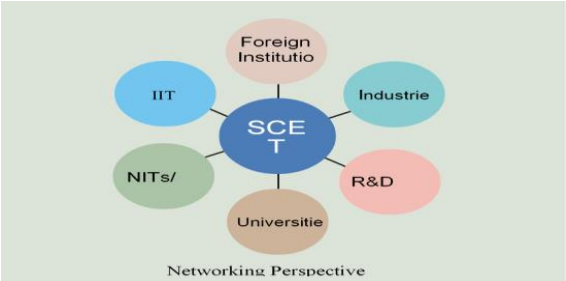
Various laboratories under each centre shall be equipped to undertake multidisciplinary research. We shall approach the corresponding funding agencies for securing funding for the development of the facilities. We will also establish a network of members of the faculties who work on common research areas that involve multidisciplinary network so that there shall be an **integrated approach for problem solving**. Students will be actively engaged in the pursuits so that they will become proficient in their field of specialization, both for conducting experiments and also for interpreting the results with a scientific temper.

Outcome

The institute will have a vibrant research eco system when it is possible to start these centres and equip them with the advanced facilities. The proposed research themes are drawn by considering the most relevant problems and challenges the world faces. The research plan shall strengthen the research paths of individual researchers as well as inter-disciplinary research teams who will facilitate the amalgamation of the fruitful ideas. A globally competitive and socially sensitive research environment is envisaged that nurtures *out of the box thinking*, and provides valuable inputs to academia and industry, thus providing valuable contributions to the society.

8. NETWORKING PLAN

Once the academic facilities and research infrastructure get strengthened, this will open up more avenues for more effective and fruitful collaborations. The institute would also join with leading national and international institutions for strengthening interdisciplinary teaching and research. Following figure shows the networking perspective. There is also a need for initiating prudent and socially relevant outreach activities. This is with a view to understand the social needs and to channelize a part of our academic efforts to solve the issues propping up in the society that can be managed using science and technology.



Networking Perspective

9. INFRASTRUCTURE PLAN

The SCET campus is located at Kodakara, Thrissur. The campus is beautiful and green. It is situated in rural setting and is free from urban problems such as traffic congestion and pollution. The land area available is 25 acres. The campus area is broadly categorized as academic(instructional) area, residential area, hostels area, and sports areas. The built-up space can be broadly categorized as instructional buildings, Knowledge centre which houses the library SCET TBI and a well-furnished multi-media hall, hostels, quarters and others. Facilities have been added in an incremental manner. The institute would like to be affirmative in providing on- campus accommodation for the students, members of the faculty and staff. So, the facilities need to cover 360-degree requirements of the campus community in terms of academics, research, residential areas, sports areas, recreation facilities, other amenities, power, water and staff welfare; because the College is situated in a semi-urban locality with a developing economy. We propose a very conservative development plan and a systematic maintenance schedule for the existing infrastructure to meet our requirements that come up along with our new and renewed activities, pursuant to our quest for national/international visibility.

The infrastructure plan is drawn to support the achievement of the institute's strategic vision and objectives, to make it a preferred destination with outstanding academic programmes and vibrant campus life. Implementation of the plan, through renovation, addition of floors to the existing buildings, new constructions and, replacement of old and single storied buildings with high rise structures, will provide more teachingfacilities,supportresearchactivities,generatemoreresidential space and promote community engagement. But these are capital intensive activities. So, these will be undertaken in a phased manner only. Hence, the following strategic plan is drawn to be persistent in the improvement of campus befitting the status of the Institute.

Infrastructure	Strategy
Classrooms	Add another set of classrooms to meet the needs for the existing intake capacity with a view to improve the academic ambience. Improve classroom facilities by providing efficient lighting systems, furniture and connectivity to the learning management system.
Laboratories and Seminar Facilities	Add departmental as well as central facilities such as convention halls, research labs and resource centre for student research, etc. to provide the distinctive experience for both student and the faculty members. Laboratories will be continuously improved through removal of obsolescence to make it useful for the upcoming teaching and research needs. Development from ideas to prototype will be facilitated within the campus.
Library& Digital Library	Library will be strengthened as a world class facility that will provide print and digital resources for teaching, learning and research.
Student Accommodation	Improve the ambience by modernizing kitchens and the food courts. Extensive use of solar energy will be recommended for lighting and other purposes, to save on power drawn from grid.
Accommodation for Research Scholars, and the Visiting Faculty	Construct a cluster of apartments in a phased manner for providing the accommodation for research scholars, international students and the visiting members of the faculty.
Sports& Recreation	Systematic improvement of the facilities will be continued, which is necessary considering by the climatic conditions of the locality.
Incubation and Research Park	Develop a mini campus for TBI and provide for a Research Park, where the budding companies can set up the R&D labs that will be mentored by the members of the faculty so as to connect them to the institutional, academic and research activities in a seamless manner.
Amenities	Improve canteen and medical facilities.
Faculty, Staff & Student Welfare	Improve/maintain campus facilities such as transport, recreation, food court, school, daycare centre, etc.
Campus Maintenance	Renovate and retrofit old buildings and maintain the campus roads because these are necessary considering the climatic conditions of the locality

10. ADMINISTRATIVE PLAN

Bringing in efficiency and increasing the productivity of the employees will be the focus in administrative reforms. The proposed Plan will cater to the needs for academic administration, HR development and infrastructure management. Excellence in quality is a pursuit than a destination. Hence, the activities for strengthening the administrative system will be undertaken deeming the march towards our goal as a journey with actions, reviews, modifications and quality assurance.

The College will approach leading national and international accreditation agencies like NAAC, NBA and ABET to get the programmes and institution duly accredited in order to adapt to international methods and practices in education.

Our objective will be to cultivate a culture of organizational excellence, effectiveness and stewardship. It should remain committed to continuous improvement, streamlined shared services, reliable and transparent decision making and targeted information policy.

For supporting the activities of SCET to take up the above challenging tasks, there has to be sufficient technical staff with specific skills. Considering the decreasing work-force amongst technical staff, efforts will be taken up for filling up the vacant positions of technical staff and to provide specialized skill up gradation training for the existing staff. This will definitely help the faculty in contributing more effectively for better teaching, research and consultancy works.

An efficient, continuously updated and state-of-the-art Management Information System (Linways, which is already in place) integrating the various domains of administration will enable SCET in attaining the goals. With complete integration of all the administrative activities in such a system, a completely paper less operation can be envisaged. Institute Data Centre will host the complete data on campus. 100% digitization of office processes and a paper free office will be our aim. All possible measures would be made from the institute administration to facilitate the Departments and the Administrative sections to carry out activities such as admission, continuous evaluation, grading, issuing transcripts, procurement, organizing conferences/workshops, operation and maintenance of research infrastructure and campus maintenance with planned deployment of staff and simplification of the process flow. Necessary structural adjustments will be incorporated to deal with the multiple roles for the members of the faculty and staff. Training and development will be integrated with the administration for proper and effective HR development.

11. GOVERNANCE PLAN

Instilling professionalism in the management of the institute is the priority under the governance reforms. The objectives in the reforms in governance is to have a system initiative for

a) Management capacity building by implementing scientific management principles
b) Enhancement of stakeholder satisfaction level

Stakeholder satisfaction is the indicator of the attainment of our goals. Within the given framework, SCET would like go for the good governance practices. Good governance is built not only on autonomy, but is also equally founded on accountability, leadership, performance, reforms and stakeholder satisfaction as the other pertinent pillars of sustenance of quality. So, the plan will be to strengthen the broad decision-making process through stakeholder participation, self-review and correction, openness to criticism and the readiness for self-learning.

SCET emphasizes the primacy of academic excellence to provide a supply of well-trained engineers and scientists, ready to make a positive impact on industry, driving global, national, and regional economic growth. All the institutional stakeholders share a framework of common values that supports superior performance in education, research, and service. Institutional goals transcend internal and external boundaries. Leveraging specific strengths and targeting areas of development where there is opportunity for significant improvement are key areas to work upon. The rigidity of discipline wise compartmentalization of research will be replaced with a more inclusive clustered approach that will transcend the boundaries of specializations to make the research to be multi-disciplinary and more socially relevant. So, structural changes will be gradually incorporated to meet such requirements.

11. ALUMNI INTERACTION

Any institution sees the alumni as its brand ambassadors. Our alumni are very passionate about their alma mater and they believe that they owe the institute for their successful careers. The enthusiasm shown by the alumni for the growth and sustenance of the institute has certainly been a great means of its well-being over the years of Its growth. Alumni act as a watch dog for our work and quality. Ways and means are being explored to bring them into the true institutional infrastructural development for capital gains.

Vision 2030: Scaling Greater Heights

Branding and Visibility

Target/ End • Market Leadership in BM/BT

Strategic Options/ Initiatives to consider and implement

- Strengthening events, conferences, seminars, conclaves in focus sectors conducted at SCET campus
- Publish Thought Leaderships, Newsletters in all departments to position SCET as market leaders in chosen sectors
- Engage actively with alumni and position them as brand champions.
- Conduct admission events, campus tours to prospective students to articulate the strengths of SCET
- Strong presence in social media and online education forums to improve visibility in the student community

Research Excellence

Targets

- 1 Research Centre / Centre of Excellence in each Department
- 2 papers to faculty ratio (publications in high-ranking international journals with high citation index)
- Research income to be around ~15% of overall income

Strategic Options/ Initiatives to consider and implement

- Strengthening Research collaborations with the industry by establishing research centres in each department in SCET and promote collaborative research and to meet the research specific needs of the industrial partner.
- Performance Management systems for Faculty members linking compensation, promotions to research outcomes – funded projects, publications
- Adequate Research Support to Faculty Members in terms of research scholars, teaching assistants

Industry Interaction

Target

- 100% placements for all eligible candidates and increased average CTC
- Establish research centres in each Department in collaboration with industry
- Incubate 20-30 startups over the next 10 years

Strategic Options/ Initiatives to consider and implement

- Strengthening collaborations with the industry by establishing sponsored research centres in SCET.
- Collaborative research, EDP/ MDP programs and academic programs in collaboration with the industry partner can be offered in such centres
- Enhance employability of students by internally conducting placement workshops and training sessions with help of experienced faculty members, alumni.
- Incorporate changes in the curriculum to include modules in order to make students industry ready
- Collaborate with placement training service providers and the industrial corporations to improve employability of the students.
- Expanding activities of entrepreneurship cell/ incubation centre to reach out to engineering students.

Faculty Excellence

Target

- 250 full time faculty with around 100 at the senior level, 100 at the middle level and 50 with 2-3 years' experience.
- Empanelled network of over 100 domain experts as industry faculty.

Strategic Options/ Initiatives to consider and implement

- Recruitment drives in IITs and NITs with the promise of attractive remuneration packages on par with the industry and good infrastructure support.

- Enhance considerably in seed money research grants and funds for young faculty members to pursue their research.

- A Queen Bee Strategy-Offer the prospect of doing research under reputed and experienced star faculty members to promising young doctorates.

- Targeting the Indian Diasporas around the world for talented scientists and academicians.

- Strengthening Faculty Development initiatives (international exchange programs, sabbaticals to work in another institution or industry etc.) to keep faculty members updated with evolving teaching and research requirements.

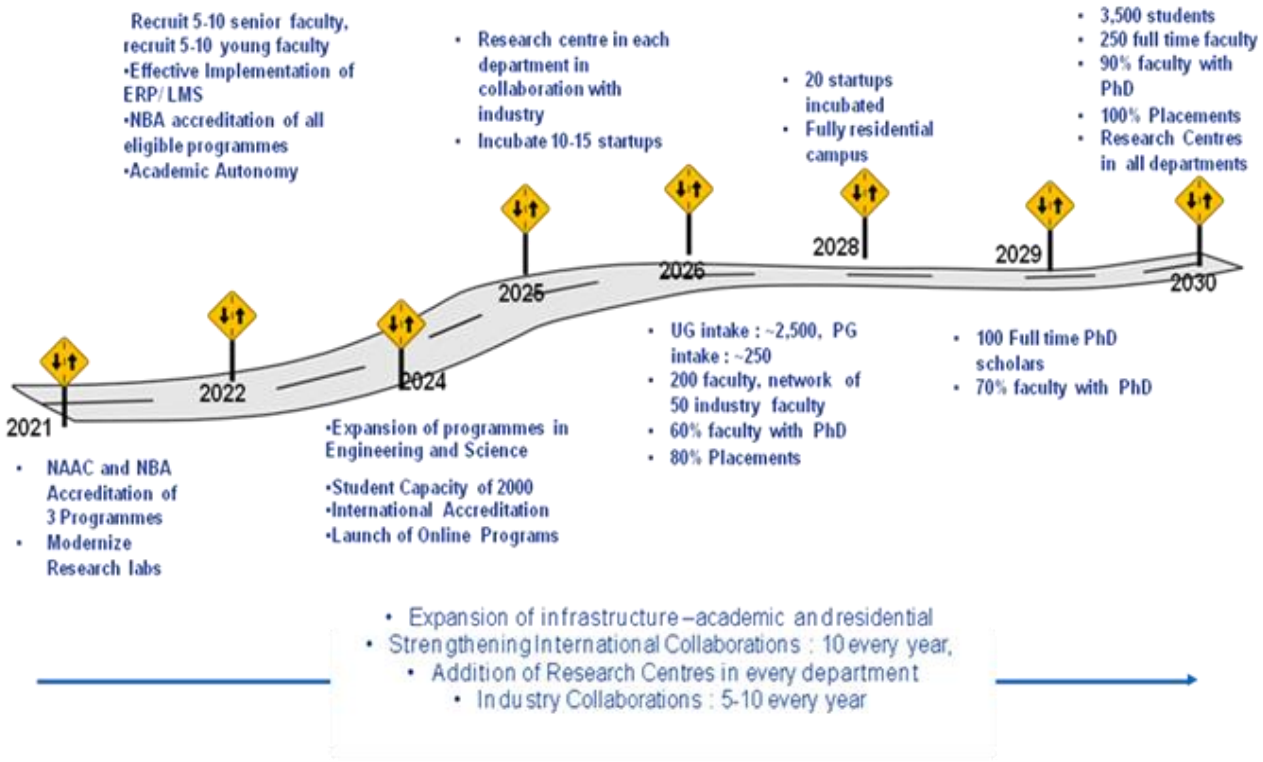
- Merit based promotions, creation of special growth path for meritorious faculty members.

Multidisciplinary Education:

The dream of SCET is to become a University with multidisciplinary education system. To provide for a holistic, multidisciplinary and broad-based undergraduate engineering education with flexible study plans, more options in choosing the subjects, and more flexibility to enter and exit the course with authorized certification, is our ultimate milestone. Undergraduates will then have the option to choose the number of years as per their requirement ranging from 1-4 years with appropriate certification. For example, certificate after 1year, advanced diploma after 2 years, license after 3 years and research license after 4 years. To achieve this dream, an implementation roadmap is prepared.

IMPLEMENTATION ROAD MAP

The Roll Out of the Different Strategic Initiatives and the Key Milestones in the Strategic Plan of SCET



MILESTONES

Time horizon Milestones

2020-2021

- NAAC Accreditation Cycle II and NBA Accreditation of BM, BT and CSE departments
- Modernization of the laboratories &removal of obsolescence
- Renovation of classrooms
- Renewal of MoUs with the industries &institutions
- Focused activities under *Ek Bharat Shresta Bharat*
- Revamping of skill development mission for community
- Operationalization of the visiting faculty scheme
- Initiation of student research activities/programmes
- National & international conferences.
- Large number of online courses.

- Increase the number of intake to TBI and formal marketing activities and Registration of TBI as a section 8 company /trust .
- Science and Technology related CSR activities.
- Recruitment of senior, middle and young faculty.

2022-2023

- NBA Accreditation of ECE, CE and EEE Departments
- Industry supported R&D Labs.
- Academic Autonomy
- Revision of the curriculum for UG & PG Programmes.
- Faculty exchange with foreign universities.
- Strengthening facilities such as Design Innovation Centre and Startup Cell.
- Implementing administrative and structural reforms
- Incubate Exchange programs with incubators of international/national Incubators

2024-2025

- Introducing credit transfer facilities.
- International brand building for higher visibility.
- Expansion of UG/PG level Programmes of Engineering/ Science.
- New MoUs as well as Renewing the MoUs with industries and Universities.
- Incubating 20 startups.

2026-2030

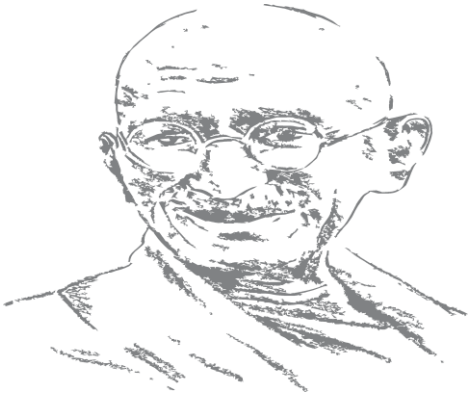
- World class research centres-Visible International ranking.
- Research Centres under collaboration with foreign universities.
- Higher percentage of students.
- Merging of sister concerns and setting up as a University.
- Initiatives to bring research activities of leading companies at research park of the institute as a continuous effort and up gradation.
- Establishment of Industrial Park in public private partnership mode.
- 100 Successful Products in Market from SCET Campus.

SUMMARY

VISION 2030

In a nutshell, SCET envisages its growth as a multi-disciplinary and inter-disciplinary institution that would be scrupulous in following the principles of equality and inclusiveness. The needs of expanding the scope and mission to become a globally leading institution necessitate concerted efforts in multiple directions, especially in reaching out to collaborate with the leading educational institutions across the world. This will enable the members of the faculty to join hands with the global academia, scientists and engineers in R&D, industry and service sectors. Back home, that will equip them with the knowledge and versatility to train the best brains.

The accomplishment of the vision for higher international standing is to be achieved through careful and systematic planning and implementation of activities like revamping the curriculum of existing programmes, strengthening the facilities, starting new multidisciplinary programmes at UG and PG levels to address the human resource requirements in the cutting edge and emerging areas, rekindling research by enabling members of the faculty to undertake interdisciplinary research under various new research centres and internationalization. Duplication of capital-intensive facilities shall be avoided by forming research clusters and facility centres. The cross fertilization of disciplines must be facilitated. The structural reforms will bring in more vibrancy and stakeholder satisfaction. The institutional activities and the networking relationships across India and abroad will help to become a truly world class University of higher education within the next twenty-five years' time.



" A small body of determined spirits fired by
an un- quenchable faith in their mission can
alter the course of history"

-Mahatma Gandhi