

# Strategic & Perspective Plan 2021-2026



SRI SHAKTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY COIMBATORE-641062

Website: www.siet.ac.in

## <u>CONTENT</u>

Sr.No.	Particulars	Page No.
1	College at a Glance	1
2	The Chairman's Desk	3
3	Vision and Mission	4
4	Process of the Perspective Plan	5
	PERSPECTIVE PLAN- 2021-26	
5	Curricular Aspects	5
6	Teaching Learning and Evaluation	5
7	Research Consultancy and Extension	6
8	Infrastructure and Learning Resources:	6
9	Student Support and Progression	6
10	Governance Leadership and Management	7
11	Institutional Values and Best Practices	7
12	College Perspective Planning Committee	8
13	SWOC Analysis	9
14	Targets	11

### <u>College at a Glance</u> Powering the Youth; Empowering the nation

Sri Shakthi Institute of Engineering and Technology (SIET), established in 2006, stands as a beacon of educational excellence in Coimbatore, Tamil Nadu, India. This Autonomous Engineering institute, approved by the All-India Council for Technical Education (AICTE), New Delhi, and affiliated with Anna University, Chennai, boasts accreditation for its programs by the National Board of Accreditation (NBA). Led by

**Dr. S. Thangavelu**, an experienced academician with 28 years of experience at Tamil Nadu Agricultural University. SIET holds the motto of 'Powering the Youth, Empowering the Nation.'

Offering a diverse spectrum of education, SIET provides 14 undergraduate, 7 postgraduate, and 5 PhD programs, with all eligible eight B.E/B.Tech courses accredited by NBA. The institute's commitment to quality education is underscored by its NAAC with A grade accreditation. Additionally, SIET has secured numerous extramural research projects totaling approximately Rs. 200 Lakhs from esteemed government funding agencies such as DST-SERB, DST NRDMS, and DAE-BRNS.

In just 16 years, SIET has ascended to the forefront of higher education, driven by a steadfast mission to achieve excellence in Engineering Education and Applied Research.

Sri Shakthi Institute of Engineering and Technology is a new age engineering institution with a difference. With a mission to empower the youth of this nation, Sri Shakthi has scaled unparallel heights in its eleven years of establishment and is still expanding the horizons at every available opportunity. The quality assured in every sphere of activity and the standards set to achieve the objectives are crafting us as one of the top-notches and the most sought-after engineering institutions in this part of the country.

Sri Shakthi Institute of Engineering and Technology (SIET) was founded in 2006 and is accredited by the All-India Council for Technical Education (AICTE) in New Delhi as well as Anna University in Chennai. SIET. The lustrous and eco-friendly campus is renowned for its contributions in the fields of agriculture and space technology. Sri Shakthi is India's first private engineering college that has launched its own satellite on 28.2.2021 from Srihari Kota. It is accredited by NAAC with an "A" grade and by NBA for EEE, IT, CSE, MECH, AGRI, and ECE. The primary vision of the institute is to impart technical knowledge and skills to the students in accordance with the needs of the industry by producing technologically superior and ethically strong engineers to transform life as a whole.

It is the moment of pride to record that our institution is the first youngest institution in India to be accredited by NBA within 10 years of its inception. Our college has been granted with research centers in the departments of CSE, ECE, EEE, IT, Civil, Physics, and Chemistry.

The India's top ecofriendly campus is spread over 32.46 acres of land and accredited by WWF, as one of India's top ecofriendly campuses. Sri Shakthi is ideally situated in the calm and serene part of Coimbatore city on the arterial of NH-544- L&T bypass road in close proximity to reputed institutions, airport, TIDEL park and multispecialty hospitals. The campus is just 2 km off from Avinashi road and 2 km off from Trichy Road.

With the balanced academic structure, we have proudly entered into the 17th academic year providing 12 UG courses and 5 PG courses. The Institution offers several programs apart from regular academic programs to enhance the competencies of students, prepare them for their career building, to refine their technical knowledge and to bridge the gap between academic and industry needs

Over the years, the college has set commendable tradition of initiative and imagination and has grown in to an institution of significant stature in the educational scene. The diverse academic activities of the college all imbued with a sound value system are focused on a balancing knowledge assimilation and skill acquisition. The college has succeeded in instilling a definite confidence in the society at large about the quality of education it offers.

The students of this institution with their exemplary discipline, serious academicextracurricular and co-curricular activities pursuits and excellent support with their teachers have quality to make this institution a name reckon within the academic and other fields.

Hence continuous improvement, expansion and growth are passing on since 2006 to achieve all round development and excellence. The discipline and dedication of management, teaching and non-teaching staff and co-operation have played instrumental role in bringing the institution to its present status and structure.

With the values, transparency, honesty and integrity the college premises to be one of the most exemplary institutions in the region.

And we know miles to go... miles to go... miles to go.

#### The Chairman's desk



Dear Students, Friends,

I have always been inspired by Dr. Martin Luther King's statement, 'I have a dream' - a dream I believe will come true - a dream that my children will one day live in a world where they will not be judged by the colour of their skin, but by the content of their character'. This need for tolerance - to create an equal society with no discrimination in Caste, Creed or Colour was best exemplified in the words of Mahatma Gandhi.

"I do not want my institution to be walled off on all sides, I want the culture of all lands to be blown about my institution as freely as possible. But I refuse to be blown off my any one of them. Mine is not a religion of the prison house. It has room for the least among God's creations but it is proof against insolent pride of race, religion or colour."

And this I believe will be the watchword of each and every Shakthian.

The vision for Sri Shakthi is to make the institution one of our nation's great engineering schools, recognized nationally and internationally for excellence in teaching, research and public service. We seek to be the preferred destination for students, practitioners seeking an engineering education, employers hiring engineering graduates and organizations seeking engineering knowledge.

We welcome you all to explore your talent to bank upon in future.

Dr. S. Thangavelu Chairman

3

#### Vision, Mission & Goals

#### Vision

To make the institution one of our nation's great engineering schools, recognized nationally and internationally for excellence in teaching, research and public service. We seek to be the preferred destination for students, practitioners seeking an engineering education, employers hiring engineering graduates and organizations seeking engineering knowledge.

#### Mission

To Provide an encouraging environment to develop the intellectual capacity, critical thinking, creativity and problem-solving ability of the students



#### Goals

We strongly believe...

Achieving 100% pass is only the GATEWAY to success. Breeding 100% employable / entrepreneurial engineers is the first MILESTONE. Creating 100% confident, contributing and self-realizing citizens who will uphold the pride and cultural ethos of our great nation is our DESTINATION.

#### **PROCESS OF PERSPECTIVE & STRATEGIC PLAN:**

The perspective plan, 2021 – 2025 of Sri Shakthi Institute of Engineering and Technology is prepared by Internal Quality Assurance Cell of College. The perspective plan is prepared by collecting ideas, suggestions and concepts from various stakeholders. The IQAC has collected feedback from Principal, various college committees, Head of Dept. and faculty members.

#### PLAN: 2021 – 2026

#### **Curricular Aspects:**

- > To introduce new postgraduate degree programs.
- > To introduce additional divisions to fulfill and cater varied demands of the students.
- > To increase student intake capacity of existing courses and improve student enrolment.
- > To promote faculty members to participate in curriculum design
- > To conduct academic, online feedback on curriculum and other quality related audits.
- Propose to augment academic infrastructure.
- To introduce carrier-oriented courses, soft skilled based courses, short term courses, & valued added courses
- > Provision of good academic flexibility at UG, PG, and research level.
- > Participation of more staff in BoS and Academic Council.
- Introduction of all programme with Major & Minor Degree verticals
- Curriculum for life skill.
- Student Induction Programme.
- > Learning outcome-based curriculum framework for undergraduate education.
- Inculcation of Human Value and professional ethics.

### **Teaching Learning and Evaluation:**

- Online feedback of teachers by peers.
- > Fostering social responsibility and community engagement in college.
- Faculty Induction programme (FIP) & Faculty Development programme (FDP) for newly appointed faculty members.
- Programme outcome, programme specific outcome and course outcome for all programme offered by college.
- > To promote the faculty to use ICT for teaching learning process.
- > To initiate students centric teaching methods.
- > To adopt and use the online learning methods.
- > To introduce remedial teaching.
- > To strengthen the self-Appraisal system (API) for teaching and non-teaching staff.
- To organize workshops for teaching and non-teaching staff for their improvements through Academic staff college.

### **Research Consultancy and Extension:**

- > Association for academic and research ethics.
- Establishment of Incubation center.
- Industry- academic innovative practices.
- To strengthen the research facilities in college and motivate faculty to involve in research by undertaking Major and Minor research project, publishing research papers in good impact factors Journals with ISBN/ISSN number.
- To organize International/ National Seminar and Conference on research and quality related theme specially on IPR and Research Methodology.
- > To increase research facilities and research center.
- > To conduct outreach programme with help of NSS, NCC & YRC
- To increase participation of students in research through field projects, house projects and publishing research paper in Seminar and Conference.
- To enhance the qualities of MoU<sup>\*\*</sup>s, collaboration with different industries, institute and NGOs.
- > To increase students training, workshop to create job opportunity for students.

#### **Infrastructure and Learning Resources:**

- Framework for Eco-friendly and sustainable campus development.
- Increase in solar energy plant up to 50 KW.
- > To provide Wi-Fi facility to the students and the staff.
- To provide e-learning resources like MOOCS, Swayam, INFLIBNET, e-journals, ebooks to students and teachers.
- Augmentation of the sport's infrastructural facilities.
- > To construct and renovate class rooms and laboratories.
- Propose the construction of and augmentation of the facilities.
- > To construct indoor stadium and swimming pool in the hostels.

### Student Support and Progression: NG THE NATION

- > To conduct soft skill development programme for students.
- > Organize study tours, industrial visits, field visits & excursion tours.
- Organize sports competitions.
- Strengthening of Placement cell, arrange the placements camps and improvement of placement services.
- To strengthen the career counseling and competitive examination guidance centre & Soft skill development.
- > To initiate Alumni engagement for development of college.

#### **Governance Leadership and Management:**

- Vision and Mission of the institute will be communicated efficiently to all the stakeholders.
- > The management and employees will work together for the betterment of the institute.
- > Faculties will be promoted and motivated to attend the faculty development programmes.
- Annual performance appraisal system to be formalized for teaching and nonteachingstaff.
- > To implements various staff welfare schemes and programs.
- > To conduct the external and internal audits regularly and periodically.
- Continuous efforts will be taken to obtain grants from different funding agencies like UGC, DST, DBT, CSIR, SERB etc.

#### **Institutional Values and Best Practices:**

- To ensure a tobacco-free and plastic-free campus through various means at all times through an enforcement mechanism, involving imposition and collection of fines from offenders
- ➤ To promote energy conservation practices like the installation of solar panels and wide usage of LED lights/ fans, and also through wide awareness creation.
- > To Promote awareness about:
  - ✓ Gender Equity
  - ✓ Energy Conservation
  - ✓ Water Conservation
  - ✓ Socio-Environmental Program (Inclusive Environment)
  - ✓ Code of conduct
  - ✓ Health Awareness

#### COLLEGE PERSPECTIVE PLANNING COMMITTEE ACADEMIC YEAR: 2024-2025

Sr. No.	Name of Member	Designation
1	Hon'ble Dr. S. Thangavelu	Chairman
2	Mr.Dheepan Thangavelu	Secretary
3	Mr.Sheelan Thangavelu	Joint Secretary
4	Dr. D Elangovan	Principal
5	Dr.S.Prakash	Dean Academics
6	Dr.P.T.Vanathi /Professor ECE/PSG Tech	Special Invitee
7	Dr.Bindu Salim	Director Research
8	Mr.Satheesh K	Dean Placement & Training
9	Dr. A.R.Ravikumar	Dean FAME/HoD AGRI
10	Dr.Kannamal K E	Member HOD Nominated by
11	Dr.Bhavani S	Principal Member HOD Nominated by Principal
12	Dr.Hemamalini M	Member HOD Nominated by Principal
13	Mr.Dhinaharan S	Member Teacher Representative
14	Mrs.Hemalatha S	Member Teacher Representative
15	Dr.Rajakaxmi S	Member Teacher Representative
16	Dr. Madheswaran K	Member Teacher Representative
17	Mr. R Karthiban	Member Teacher Representative
18	Dr.Nandakumar R	Member Teacher Representative
19	Dr.J.Bindhu	IQAC Coordinator

#### **SWOC** Analysis

SWOC analysis is done for a strategic planning so as to understand the present and vision for the better future.

#### **Strengths:**

- > Academic autonomy to refine curriculum and syllabi.
- Visionary leadership that encourages and supports progressive institutional development.
- Considers the holistic development of the individual by balanced support in education, arts, sports and humanities.
- Commitment to provide the state-of-the art infrastructure with sustainable, tech-savvy and eco-friendly practices.
- Rich diversity in the Engineering programmes :12 UG programmes & 8 PG programmes
- Provides many Value Added Courses in all programmes that lead to industry employability with consecutive 100% placement for all registered students over the last 8 years.
- > Provides opportunities students with merit scholarships each year.
- Focus on industry linked final year projects, which lead to better graduation and employability outcomes.
- Encourages mini projects through Engineering exploration Laboratory
- Networks to bridge the gap between the industry and academia through a number of industry interaction events.
- Strong network with around 5000 alumnus from 12 batches.
- > Encourages faculty members to pursue opportunities in Research & Extension.
- Committed faculty members with long tenures of service to the institution.
- > Awarded as the best engineering college by various surveys
- > Organises outreach programmes for the villages around the college.

## POWERING THE YOUTH

### EMPOWERING THE NATION

#### Weaknesses:

- International relations for furthering the educational experience of students and the research experience of the faculty.
- > Diversity of faculty and students in-terms of the geographical origins.
- $\succ$
- Output in-terms of research projects to improve the practical knowledge of the students as well as the faculty members

#### **Opportunities:**

- Enhance the scope and scale of the Research & Consultancy activities on campus.
- Create multiple Centres of Excellence with industry partnership
- Focus on nurturing and creating more student entrepreneurs
- Create opportunities in abroad for students to do short term courses in the universities with which MoUs are signed and others too.

#### **Challenges:**

- > Navigating the short term volatility in the core subject Jobs market.
- > To inspire faculty members to obtain more funded projects and claiming patents
- To create the attitude and focused mindset among all stakeholders to achieve our quality objective



### Methodology

Based on the strategic plan, the methodology adopted to accomplish the goals is

- Personal interviews and discussions were conducted with the stake holders including college officials, students, alumni, people's representatives, academicians and industry experts.
- ➢ Visit industries, government officials, and collect data before initiating the plan.

## **Targets**

2023

NBA (all eligible engineering programs) 2024 NAAC A++ (highest score) 2025 NIRF (to be ranked within 200)

TARGETS	ACTION PLAN	OUTCOMES 2025
Undertaking Inter- disciplinary projects – Establishing Centers inside the campus	Projects formulated and sent for national funding in the focal areas -200 per year	200 projects submitted anda minimum of 100 sanctioned.
Projects to be sent to both national / international funding agencyes	Projects formulated and applied in the thrust areas –20 per year	20 projects submitted and minimum 10 sanctioned
Projects of students to be developed into the domains of focal areas	Papers published based on each project in Scopus Index publications – 400 per year. Papers published by the faculty members in Scopus Index publications – 400 per year.	Minimum of 800 projects and minimum of 400 papers published in Scopus Indexed journals/ proceedings
Patents in focal areas	Filing and publishing100 patents/ yearbased on the works of students and Faculty members.	200 patents filed and published 25 commercialized



## **POWERING THE YOUTH**

EMPOW Published by: NATION

## **Internal Quality Assurance Cell**

Sri Shakthi Institute of Engineering & Technology