STRATEGIC PLAN 2024– 2029

Sri Venkatesa Perumal College of Engineering and Technology

(Autonomous)

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Executive Summary

Technical higher Education is important for the country since it helps to develop technology, increase industrial production and employment that will improve people's quality of life. Sri Venkatesa Perumal College of Engineering and Technology (SVPCET) – Autonomous, has completed its 24 years of dedicated service in the field of technical education and has established a name for itself in offering high quality professional education. The college has developed and successfully implemented Strategic Plan for the period of five years (2018-23) as a long term plan. Majority of The goals envisioned in the plans were achieved. In order to further scalene weights in this highly competitive dynamic global scenario and to meet the expectations of the stakeholders, the college intended to renew the strategic plan for the duration of 2024-2029. Based on the results of implementation of the previous strategic plan, a detailed SWOT Analysis was undertaken. After a thorough analysis and discussions, then view strategic plan has been developed.

The effects of changing global scenario have created unprecedented problems, such as covid pandemic and also opportunities in higher education in the new millennium. In the sector of teaching-learning, teachers have to demonstrate their skills through several innovative teaching methods for transforming the students into high quality professionals. The modern higher education system demands the teachers and students to make a significant contribution through cutting-edge technology, research and innovation that has a measurable societal impact. Moreover collaborations with Industries, research organizations and foreign universities are becoming increasingly important. Accordingly, the new strategic plan aims to offer a wide spectrum of facilities to meet the current challenges in every aspect with the significance focus on teaching and learning, research and development and collaborative activities at the national and the international level.

1.0 The Path Travelled

1.1 Preamble

Sri Venkatesa Perumal College of Engineering and Technology is a premier autonomous Institution, approved by the All India Council for Technical Education, New Delhi and affiliated to the Jawaharlal Nehru Technological University-Anantapur (JNTUA), Ananthapuramu. The college was started in 2001 by TAMILIAN EDUCATION ACADEMY formed Educationalist and Philanthropist Dr. Ravuri Venkataswamy with the motto to provide affordable and value-based quality technical education to the students of this region. From a modest beginning of a total of 180 students in 3 UG branches, the institution has grown phenomenally in 24 years to the present strength of over 3000 students in 8 UG programmes and 5 PG programmes.

The dedication and support of management combined with the efforts of the Principals, Faculty and disciplined Students has helped the college to add several laurels to its credit.

SVPCET is one of the first self-financing engineering colleges to be established in Andhra Pradesh. Located in a serene and sylvan atmosphere in a rural village Chinnarajakuppam at Puttur, the college has a sprawling campus of 25acres of land and a built-up area of 37500 sqm with state-of-the-art infrastructural facilities and an excellent academic track record.

The institution is affiliated to Jawaharlal Nehru Technological University-Anantapur (JNTUA), Ananthapuramu. Since from its inception, it was affiliated to JNTUA till the academic year 2017-18. It conferred Autonomy by UGC in the year 2018, affiliated to JNTUA. NAAC accredited in the year 2013 with A grade, 2018 with B+ grade and 2024 with A grade.

1.2 Academic Milestones (Commencement of various programs)

2001	:	SVPCET was established with 3 UG programmes (ECE, CSE, IT)
2002	:	B.Tech in EEE
2006	:	MCA & MBA
2007	:	M.Tech- Computer Science Engineering M.Tech- Electrical Power Systems
2011	:	B.Tech in Mechanical Engineering M.Tech- Embedded Systems
2014	:	B.Tech in Civil Engineering
2022	:	B.Tech.- CSE (AI)
2023	:	B.Tech.- CSE (AI & ML)

1.3 Highlights

- ✓ Eco-friendly green and clean campus
- ✓ 8 UG programmes (B.Tech.),3 PG programmes (M.Tech), MBA and MCA
- ✓ 3322students (Total Intake-all years),188faculty(25 with PhD Qualifications) and163staffmembers
- ✓ Well defined curriculum with opportunities to learn beyond syllabus
- ✓ Institutions Innovation Council to create and strengthen the culture of Innovation and Entrepreneurship ecosystem
- ✓ Excellent placement record
- ✓ State-of-the-art laboratories
- ✓ Campus-wide Networking with Wi-Fi connectivity, 1Gbps Internet
- ✓ Library, Online Journals and Self Learning facility
- ✓ Seminar Halls, Volleyball & Basket ball court, Playground and Amphitheatre
- ✓ Dispensary with Ambulance
- ✓ R.O water treatment plant with a capacity of 2200 liters per hour

- ✓ 2013-2014: 3 UG programmes (3 years: ECE, CSE, & EEE) accredited by National Board of Accreditation (NBA) under Washington Accord under Tier II. Again in 2022-23, ECE & CSE accredited by National Board of Accreditation (NBA) under Washington Accord under Tier II.
- ✓ Awarded "A" grade by A.P State Council for Higher Education.
- ✓ NAAC with A Grade Accreditation in the year **2013**
- ✓ UGC – AUTONOMOUS status for 10 years in the year **2018**
- ✓ NAAC with B+ Accreditation (2nd Cycle) in the year **2018**
- ✓ NAAC with 'A' Accreditation (3rd Cycle) in the year **2024**

2.0 National and Global Scenario

Indian Scenario in Engineering Education

With the tremendous use of technology by almost every citizen of our country in their day-to-day life, the critical role of engineering education in addressing the challenges of our society has received a good recognition. Today, India produces around 1.5 million engineers from almost 6000 colleges every year. These educational institutions and engineering educators own the responsibility of producing competent and skilled engineers to cope with the changing requirements of the industry. As per the present scenario, it is evident that the demand lies in adopting emerging technologies as opposed to traditional engineering.

One of the forecasts of future technology shows a clear trend towards software healthcare services, especially artificial intelligence (AI), internet of things (IoT), embedded software, mobility, analytics, and cloud; that are growing at a rapid pace as compared to traditional technologies. Hence the recommendation from AICTE is to give emphasis on these areas viz, AI, IoT, Blockchain, Robotics, Quantum Computing, Data Sciences, Cyber Security, 3D Printing & Design. More over multi-disciplinary engineering courses, especially in Computational Biology, Biotechnology, Biomedical Engineering, Mechatronics, Space Technology, Aerospace, Agriculture and Environmental Engineering need to be focused.

With the increased pace of technical advancements, competencies of the faculty also need to be developed, especially in the areas of new age technologies and research. To promote innovation and reformation in engineering education, new skills and competencies to be possessed by future engineers need to be analyzed and action plans are to be evolved to bridge the gaps. Presently all industrial sectors require graduates with a higher degree of cognitive abilities such as creativity, logical reasoning and problem-solving sensitivity as part of their core skill set.

In the context of Institute-Industrial partnership, the demand-supply gap has to be reduced by making internships as a mandatory one for all technical education students. Also signing of MoUs both with government agencies, private and start-ups need to be accelerated to address the challenges of the future and to produce industry ready graduates.

New Education Policy 2020–Highlights

The New Education Policy (NEP-2020) has introduced many reformations in the Indian education system. The new policy envisions offering a new structure to the education system in the country. From school education to higher education, NEP proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st Century education, while remaining consistent with India's traditions and value systems.

Introduction of a four-year undergraduate degree with multiple entries and exit options, and establishing a standard higher education regulation for both private and public institutions are some of the critical features for higher education sector.

The long term plan as per the policy is to do away with the current system of colleges being affiliated to universities. Each college would become either fully integrated into a university or converted into an autonomous and independent degree providing institution. An independent board would come to govern each higher education institution (HEI), whether a college or university.

Under the policy, numerous existing tiny colleges that are pedagogically financially unviable would be merged with larger HEIs. Each HEI would have a minimum of 3,000 students. HEIs will have the freedom to choose the mix between research and teaching as per their strengths, with the sector eventually consisting of highly research-intensive institutions at one extreme and highly teaching intensive institution on the other. This is broadly the structure prevailing in the US and UK.

A complete restructuring along these lines is the long-term goal for which the policy sets a deadline of 2035. But the policy contains many low hanging fruits that can be harvested within few years. These include conversion of leading colleges into board administered, autonomous, degree giving HEIs; freeing up undergraduate students to take courses across all disciplines; launch of a four-year bachelor's degree; openings to foreign universities; incorporating vocational education in college curriculum; and creation of a National Research Foundation. The government has to draw up a time-bound plan to implement these changes over the next five years.

The undergraduate degree will be of either 3 or 4-year duration, with multiple exit options. For instance, a student can exit with a certificate after completing 1 year in a discipline or field including vocational and professional areas, or a diploma after 2 years of study, or a Bachelor's degree after a 3-year programme. The 4-year multidisciplinary Bachelor's programme, however, shall be the preferred option.

- ❖ An Academic Bank of Credit (ABC) shall be established which would digitally store the academic credits earned.
- ❖ The 4-year programme may also lead to a degree 'with Research' if the student completes a rigorous research project.
- ❖ Model public universities for holistic and multidisciplinary education, at par with IITs, IIMs, etc., called MERUs (Multidisciplinary Education and Research Universities) will be setup.
- ❖ Higher education institutions shall move away from high-stakes examinations towards continuous and comprehensive evaluation.
- ❖ India will be promoted as a global study destination providing premium education at affordable costs. An International Students Office at each institution hosting foreign students will be set up.
- ❖ A legislative framework facilitating such entry will be put in place, and such universities will be given special dispensation regarding regulatory, governance and content norms on par with other autonomous institutions of India.
- ❖ In every education institution, there shall be counseling systems for handling stress and emotional adjustments.
- ❖ Efforts will be made to incentivize the merit of students belonging to SC, ST, OBC, and other SEDGs.
- ❖ Vocational education will be integrated into all school and higher education institutions in a phased manner over the next decade. By 2025, at least 50% of learners through the school and higher education system shall have exposure to vocational education.
- ❖ The policy also speaks of creating a National Research Foundation (NRF).
- ❖ The policy also mentions the creation of a Higher Education Commission of India(HECI).

HEIs shall have the flexibility to offer Master's programmes of two years for those who have completed a three-year undergraduate programme, one year for students who have completed a four-year undergraduate programme, or five-year integrated Bachelors and Masters programmes.

1. The policy says that 'high performing' Indian universities shall be encouraged to set up campuses in other countries. Similarly, selected universities – such as those from among the top 100 universities in the world – shall be encouraged to operate in India
2. A National Research Foundation shall be established to facilitate "merit-based but equitable" peer-reviewed research funding.

The policy says that the centre and states shall work together to increase public investment in education to 6 percent of the gross domestic product, from the current 4.43 per cent.

Global Scenario

Indian economy today is closely integrated with the global economy. Multinational Corporations (MNCs) see India both as an attractive market and as a country where production and services could be profitably out-sourced. In fact, the boom in the outsourcing of IT services by US firms can be said to be the root cause of the growth in engineering education in India.

While many Western countries have rapidly ageing populations, India and China have a large population of young people who would seek education in higher educational institutions including engineering colleges. This means that the reputed universities abroad face a difficult task in enrolling enough local students to ensure their viability. Therefore, foreign universities are actively promoting their services to Indian students. International co-operation in higher education has now become an economic necessity.

University Grants Commission has recently notified regulations which provide a regulatory framework for academic collaborations with foreign universities. This provides both an opportunity and a threat to Indian higher educational institutions. It opens up avenues for research collaboration, student and faculty exchange programs and an opportunity to improve the standard of education provided to our students.

The institutions which use this framework to collaborate with foreign universities can improve the quality of the teaching- learning process and hope to attract better students. Others who fail to use this opportunity to improve the quality of the education that they offer would inevitably suffer from reduced patronage and face a difficult future.

In order to meet the demands of the market and the globalization process which links the world in an internationally social and economic dimension, graduates should have problem solving expertise in solving problems in areas such as environmental and energy, bioengineering problems (including medicine), ultra-nanoscale, miniaturization, problems related to population growth and in managing globalization.

India has recently been accorded the position of a permanent signatory membership of the Washington accord. This would mean that programmes that are accredited by National Board of Accreditation will have international validity. This is a significant step to improve the quality of our engineering education to international standards.

Since, engineering education is being shaped by a wide range of divergent global factors including covid pandemic, it is mandatory for Institutions to transform engineering education in a comprehensive and holistic way to prepare students for the challenges ahead.

3.0 Review of Strategy Plan (2018-23)

	ASPECTS	ATTAINMENT
1. Teaching Process & Learning Process	ICT Enabled Class Rooms	The facility is created and in usage by all faculty
	Smart class rooms	Established with one smart class room per department.
	Faculty Self Appraisal System	It is in practice and the performance analysis is also implemented. Academic performance is analyzed and audited once in every semester.
	Introduction of online/MOOC Courses	Mandatory MOOC course is implemented in R18 curriculum. In the present R20 curriculum. It is available for Honor and Minor Degree courses.
	Self learning material	In each theory course, advanced topics are given to students to learn, prepare and submit the assignments.
	Subscription to online resources	25% of Students have subscription to APSCHE-LMS portal.
2. Training and Placements	Establish a training centre	It is implemented. Training activities are done by external and internal experts.
	Mentoring with experts from industry	Experts from industry are invited to give career guidance every year.
	Technical domain Training	One or two Domain specific lectures/workshops are organized in each department.
	Updating of College portfolio	Periodic update is in place.
	Inviting reputed industry and corporate	5 or more Industrial expert talks are arranged by every department per year to reduce the industry-curricular gap.
	Early on boarding	Importance is given for final year – end semester in Academic Calendar to complete it without much deviation to meet this strategic point every year.
3. Extension activities: Faculty Development & Student Development	Institutional comprehensive training development plan	One FDP per department/year is conducted.
	Qualification up gradation	Faculty members are encouraged and permitted to go on study leave to complete their higher studies as per their requirements.
	Faculty self appraisal system	Yearly, Self Appraisal data are collected form faculty are collected, analyzed and reviewed by the management. Appropriate steps are followed by means of appreciation /action for betterment of individual as well as for growth of institution.

	Support to for higher education and research & development	Faculty members are allowed to undergo higher studies. They are continuing the service on their completion.
	Establish Student Development Cell (SDC)	It is implemented. The SDC is supported by the Students Association of each department and activities are conducted weekly during the mentioned period in the time table.
	Organize extensive interaction with experts from industry and premier institutions	Implemented. Through academic planner, dean academics monitor the conduction of such events and review the progress of the departments.
	Support students for industrial training and internship	Implemented. Industrial training/Internship is made mandatory in the R20 regulation.
	Feedback on faculty for better education	Feedback is taken twice/Semester (Phase 1 & Phase 2 in each semester).
4. Curriculum Update	Choice based credit system	It is implemented effectively and being in force.
	Outcome based education	It's a regular process followed by entire SVPCET institution as per the NBA requirements.
	Adopting Standards of Institutes/Universities curriculum	While framing the curriculum, the curriculum of various universities and institutes are taken into careful consideration to ensure the quality of Teaching-learning as per the global needs.
	Feedback on curriculum for betterment	Yes, it is implemented by taking necessary feedback from stake holders. It is as per the guidelines of Curricular Development Cell (CDC).
5. Industry Interaction	Liaise with industry for faculty, staff and student development	The activities in this strategic aspect need improvement.
	Seek feedback and inputs from industry on curricular aspects and skill development	It is followed by collecting feedback from industry experts, who are the members of BoS as well as the from the visiting experts.
	Industrial experts as adjunct faculty	Few (2 to 3) industrial experts are visiting as adjunct faculty and interacting with department/students.
	Collaborate with industry to reduce gap	It is implemented.
	Industrial Visits	Yearly once it is conducted in each department. However it needs improvement.
	MOUs	MoUs are being made with industries by all the departments.
6. Research and Consultancy	Faculty with PhD	Nearly 30% are doctorates. Around 20% are pursuing Ph.D.
	Online Journals that supports faculty research	Yes, Facility is available in the central library.
	Research supported labs	Yes, Facilities are existing. However, enhancements in the existing facilities are needed.

	Apply for External research funding Projects	Proposals are submitted. But more efforts are needed to convert proposals to project.
	Updating of College portfolio	It is performed at regular interval.
	Technical Services such as sophisticated equipment and software	It is not followed. Need attention.
7. Entrepreneurship activities	Organized special awareness and training for entrepreneurship	2 to 3 events are conducted per year.
	Interactions of students with Angel investors and other financial entities	Need to be followed.
	Applying for national funding schemes	Yes. It is performed. The quantity needs to be increased.
	Promoting Student entrepreneurs	2 to 3 entrepreneurs are existing every year. Needs more initiation and motivation.
	No. of Events Organized	An average of 2 to 3 events are conducted. Its 50% achieved from the expected target.
8. Alumni Relations	Alumni digital database	It is created. But need improvements.
	Organize interactions with Alumni	Yes, yearly once it is organized.
	Involvement in Board of studies	All departments have Alumni as member of BoS in their respective departments.
	Events conducted with Alumni	Yes, The target is 100 % achieved.
9. Improving quality resources	Recruiting new PhD holders	During recruitment process, preference is given to Ph.D holders.
	Updation of Number of online journals in the library	Total 19000 Journals are available. It meets the goal.
	Updation of Number of Print journals in the library	Total 19000 Journals are available. It meets the goal.
	Number of Scopus publications	Scopus publication count is 20 % achieved in its target. Need attention.
10. Quality assurance measures	NAAC	A Grade in 2024
	NBA	2 departments: ECE & CSE have 3 years of accreditation. EEE & MECH are in progress for NBA accreditation.
	Autonomous	Autonomous status is active.
	IQAC Audit	Periodical audits are performed twice in an year by internal-senior academic experts through IQAC. External audit is done for last two academic years.

4.0 SWOT Analysis

Strengths:

1. Committed Management
2. 24 years of Excellence in Education
3. Brand Name and most preferred institution
4. Excellent Infrastructure
5. Quality & Competent Faculty
6. Retention of employees
7. Research Publications
8. Excellent internships &placements
9. Disciplined campus
10. Innovations ensured through Institutions Innovation Council
11. Community linkage through SVPCET-NSS unit.
12. More than 10 active MoUs through Industry-Institute Interaction Cell
13. Skill Oriented and Skill Advanced (SOC & SAC) Courses to prepare students industry ready.
14. Teaching-learning approaches for Advanced learners and slow learners.

Weaknesses:

1. Existing policy limits attracting top quality faculty
2. Lack of communication skills of students
3. Rural-Location disadvantage.
4. Shortage of Technical staff
5. Alumni engagements need improvement
6. Professional bodies need to be strengthened
7. Institution- Industry interaction needs foreign collaboration
8. Lack of Industrial consultancy & applied research.

Opportunities:

1. Starting new cutting edge post graduate programs
2. Eligibility for Deemed to be University status
3. Enhance research activities through TBI and IIPC.
4. Establishing the centre of excellence in emerging areas.
5. Starting Integrated programmes
6. Strengthening collaboration with industry in research, consultancy, training & internships.
7. Global initiatives through foreign university tie-ups.
8. Enhanced community engagement
9. Establishing a continuing education cell.
10. Credit Transfer system to attract student intake

Threats:

1. Declining intake due to the rise in the number of institutes that are being setup in the region.
2. Shortage of faculty due to declination of interest on teaching profession.
3. High Subscription rates of e-consortia.
4. Increasing costs of publications.
5. Fast changing of industrial requirements.
6. Decrease in quality of student intake post Covid pandemic.

5.0 Vision, Mission and Quality Policy

Vision

To emerge as a Centre of Excellence for Learning and Research in the domains of engineering, computing and management

Mission

IM1 : Provide congenial academic ambience with state-of-art resources for learning and research.

IM2 : Ignite the students to acquire self-reliance in the latest technologies.

IM3 : Unleash and encourage the innate potential and creativity of students.

IM4 : Inculcate confidence to face and experience new challenges.

IM5 : Foster enterprising spirit among students. Work collaboratively with Technical Institutes / Universities / Industries of National, International repute.

Quality Policy

Sri Venkatesa Perumal College of Engineering and Technology strives to establish a system of quality assurance to continuously address, monitor and evaluate the quality of education offered to students, thus promoting effective teaching processes for the benefit of students and making the college a Centre of Excellence for Engineering and Technological studies.

6.0 Strategic Plan for 2024-29

6.1.Teaching Learning Process

S.No	Goal	PresentStatus	Strategy	ExpectedOutcome
1	Introducing Innovative Teaching Methods	OBE is in practice throughout the Institution.	Designthinking/case study, Flipped Classroom, Practical Oriented learning etc.	Atleast any one activity per course
2	Developing e-content to encourage self Learning aspects	e-content are being developed for some of the courses	Developing Videos and Smart books	Lecture videos for advanced technology courses may ease the learning process
3	Developing Virtual Labs	Facility is not created	Training to be given for developing virtual lab Contents	Atleast one lab per department
4	Enhancing multi-disciplinary approach in teaching	Open elective concept is being introduced	Promoting Multidisciplinary projects.	25% of final year projects may be multi-disciplinary
5	Providing personal and career mentoring to students	Counseling is done weekly	Enhancing mentoring activities	• Students activities, monitoring of attendance through online platforms • Use of digital platform/parent app for quick communication
6	Promoting Technology Assisted self learning	Online courses are not mandatory .	Encouraging students to undertake more online Courses through self study	• Mandatory MOOC Course /NPTEL courses • Credit transfer system
7	Converting Projects into papers/products/ patents	Currently not followed	Encouraging students to convert projects to papers/ products/ patents	Atleast one Publication is to be mandatory during graduating period

6.2 Resources–Infrastructure:

S.No	Goal	Present Status	Strategy	ExpectedOutcome
1	Laboratory up Gradation	Followed as per need	Purchase of new equipment as per Up gradation of syllabus	Atleast 5 new equipment per Department every year
2	Creating smart classrooms/studios	Available in few department(ECE,CSE)	Recording facility may be created in each class room to enhance e-content development	One well-equipped studio for college
3	Creating Teaching & Learning resource repository	Not existing	Developing e-learning resource repository consists of PPTs, Videos, short summary, formula, Q-bank prepared/ compiled by Faculty members and to be kept for free access to students	Repository for every subject should be created in each department
4	Creation of Continuing Education cell	Not existing	To organize brainstorming Lectures and motivate faculty and students towards continuous learning To create platform for offering online courses in NPTEL, Coursera, Udemy etc. by our faculty	At least one online course per department to be offered in a year
5	Creating centralized e-data management system for the institution	Not existing	Providing a separate server for data management system for faculty and students.	All the student and faculty details should be available and accessible by everyone from the centralized server.

6.3 Human Resources

6.3.1 Human Resources –Faculty

S. No	Goal	Present Status	Strategy	Expected Outcome
1	Faculty retention	Faculty retention needs improvement	HR Policies to introduce the monetary benefits to retain the faculty	Increase in Retention rate as required by accrediting bodies
2	Faculty Student ratio	1:20	Recruiting faculty members to meet the ratio	AICTE and NBA norms to be met.
3	Faculty Professional skill development	Needs improvement	• Online course completion • Participation in FDP (morethan5 days) • Outside world Interactions need improvements	• One per faculty in an academic year • One per faculty in an academic year
4	Faculty Induction and Pedagogical programme	Needs improvement	• Training for faculty with less than two years experience. Refresher Workshop for faculty With two-to-five-year experience	• Minimum one activity at institutional level per year

6.3.2 Human Resources-Supporting Staff

S.No	Goal	Present Status	Strategy	Expected Outcome
1	Staff retention	Good staff retention	Reward and recognition to be given every year based on the performance.	Averageyearofexperienceofstaff memberineverydepartmentshoul dbeminimum 10years.
2	Staff skill up gradation	Needs improvement	Sponsoring staffs to participate in skill development programmes with minimum two to five days.	50% in each dept per year
3	Staff Qualification upgradation	Needs improvement	Sponsoring staffs for higher Studies	Atleast10%atinstitutional Level

6.3.3 HumanResources-Students

S.No	Goal	PresentStatus	Strategy	Expected Outcome
1	Student diversity	Mostly from Andhra Pradesh	Conducting National level competition And create promotion in other states.	10%fromotherstates
2	Quality Placements	Needs improvement	• Conducting core/ software training programmes • Conducting value added/one credit courses • Identifying and inviting a greater number of reputed companies for placement	• Minimum2programmesperdepartment • Every student must attend one VAC • 85%ofplacementatinstitutional level/departmental level
3	Student Participation in Innovation programmes	Needs improvement	• Engaging students to develop innovative projects • Funding support to develop projects • Organizing Exhibitions and Hackathons, etc.	• Minimum5projectsperdepartmentto be scaled up. • Minimum one project per student to be exhibited
4	Competitive examination and Higher studies	Needs improvement	• Conducting awareness/ training programmes • Conduct mock tests for GATE & CAT	• Minimum20%ofstudents shouldinvolvein higher studies in each department
5	Entrepreneurship development/ Promoting Startup	Needs improvement	Conducting awareness programmes encouraging students to participate in Idea contest and Pitch decks	At least two per year

6.4 Research and Development

S.No	Goal	Present Status	Strategy	Expected Outcome
1	R&D Grants received	Funds received from SERB.	• Focus more on Multi-disciplinary research. • International funding can be obtained • Search for funding from other funding organizations (NGOs/ Ministry) • Every faculty member with Ph.D. qualification shall apply for a minimum of one funded research project per year • Awareness programs can be conducted by arranging experts guidance to write attractive research proposals for successful grant	• Minimum 50 Lakhs funding per year from external funding agency
2	Sponsored Research Programme	NIL	• Search for New and Viable funding agencies to provide financial support for organizing FDP/ Workshop and Conferences • The Institution supports for organization of high-level conference/ workshops/ seminars	• Minimum 10 FDPs/ workshops and 1 international Conference per year supported by external funding agency
3	Publication (Journals andBooks)	Not up to the mark	• Publication of research work in Science Citation Index (SCI)/ Scopus Journal • Faculty member with Ph.D. qualification should publish minimum one SCI/Scopus paper per year and Faculty with Masters Degree qualification should publish	• Average of one paper per faculty in SCI/Scopus journals.

			Minimum one paper in UGC Care journals per year • Faculty members are to be appreciated with appropriate monitory incentives for their Web of Science/ Scopus indexed journal publications • Faculty members are to be motivated to write Book and publish with renowned publisher.	
4	Improvement of Citation Index	Need improvement	• Plagiarism software is needed • Qualitypublicationswillenhancecitationindex.Incentivescanbeprovidedforpublicationswithhigh citation.	• Average Scopus-indexed citations should cross 4 perpaperforlast3yearpublications.
5	Joint/ Collaborative Research	Research policy is created	• The Institute should encourages faculty members to establish net work with other higher institutions of learning and research organizations within India and abroad and go for MOU • Registration Fee, travel, boarding and lodging expenses to participate in conferences/ workshops/ seminars and other professional development activities have to be provided by the Institution partly.	• Collaborative/ joint research projects with lead institutions/R&D laboratories/ industries.
6	Patent/IPR	• Patents filed. None granted.	• Financial and Administrative support is to be provided to all faculty/staff/students for filling of patents/ other IPR related activities • Good projects to be incubated by TBI with funding support from TBITBI Schemes	• Need to increase patent filing habit to enhance the possibilities of atleast 5 patent grants per year

7	Centre of Excellence	Not in place	• Based on the core strength and expertise available, each Department to plan to establish one centre of excellence.	One Center of Excellence in each department.
8	Research Centre	Not in Place	• Based on the core strength and expertise available, each Department • To plan to establish one research center	• 100%PhDshouldgetrecognizedassupervisors

6.5 Collaboration at National and International level

S.No	Goal	PresentStatus	Strategy	Expected Outcome
1	Promoting MoUs	Limited to local industries	Identifying more number of Industries/ Higher Education Institutions at national and international level for collaborative works	• At least 2 new MoUs per year in every department • Atleast three activities (Expert lecture/ Industrial Training, Internship, Industrial Visit project) from each MoU per year.
2	Industrial Training for Faculty	Not in practice	Encouraging Faculty members to get Industrial exposure for minimum 5 days	• 25% of faculty per department in a year
3	Industrial Training for Students	Internship / Community Service Project is mandatory in curriculum	Creating list of core industries and encouraging students for Industrial visit, In-Plant Training and Internship	• Atleast 1 industrial visits per academic year • Atleast 3 industrial visits per student in four years • Atleast 1 Inplant training per student in four years.
4	Student Exchange programme	Not in place	Sponsoring students to pursue education inreputedInstitutionsinIndiaandabroadunderstudentexchangeprogramme	• Atleast 1% of total students at institutional level in an academic year for minimum 2 months

5	Faculty Exchange programme	Not in place	Sponsoring Faculty members to teach/ pursue research in reputed Institutions in India and abroad/R&D laboratories.	• At least 3% of total faculty members at institutional level in an academic year for minimum six months
6	Training Programmes for Industrial Personnels	Needs improvement	Identifying the training needs of Industry and the relevant expert faculty	• Master list of areas of training • Minimum one training programme at department level in a year
7	Promoting Industrial Consultancy Activities	Needs improvement	Identifying possible industrial Consultancies and communicating with Suitable industries	Master list of possible industrial consultancies provided by each department • At least one consultancy activities per department in a year.
8	Development of Sponsored Laboratories	Needs improvement	Identifying the possible areas for developing sponsored laboratories.	Atleast three sponsored • Labs to be developed at institutional level in the plan period.
9	Collaboration with Alumni	Needs improvement	• Creating master list of alumni contact details for every batch in each department • Creating alumni chapters in major places in India and abroad. • Conducting alumni decade meet and Silver Jubilee meet every year	• Master list of alumni contact details for every batch in each department Should be available • Minimum5alumnichapters programmes with at least any one activity to be

			• Creating a master list of renowned alumni in various categories such as Industrial expert, Academic expert, renowned entrepreneur. ConductingAlumnilectures	initiated by each chapter. • Atleast two activities should be initiated Minimum four alumni lectures per department in a year.

6.6 Governance

S.No	Goal	Present Status	Strategy	Expected Outcome
1	Data Management System	Department level maintenance	Centralized data collection and maintenance must be established.	To be established within two years
2	Exploring new avenues of fundraising	Needs improvement	• Establish centers through sponsorship from industries • Attract benefits from Corporate Social Responsibility • Increasing funds from research projects, consultancies	• Atleast one sponsored center from industry • 20% Increase of R&D fund every year
3	Linkages with international universities for horizon expansion	Not in place.	• Develop mechanisms for international relations • Identifying partner Universities at International level and sign MoUs • Organize joint activities like conferences, workshops, credit courses, expert lectures	• Atleast 3 MoU with international universities
4	Bringing Alumni Engagement onboard	Needs improvement	• Enable, facilitate seamless coordination between alumni association and Institute • Multiple interaction modes – interaction between alumni and students –mentoring • Interaction between alumni and faculty • Alumni support for students placement and internship • Enhance institute responsiveness to alumni request • Build corpus fund for sustainable activities of alumni association	4 activities at Institution level

5	Advance Frontiers of knowledge	Needs attention	• Encourage conduct of advanced research conferences at the institute • Promote Ph.D. students exchange with partner international universities • Encourage formation of multidisciplinary research teams and centers· • Enhance facilities for Ph.D. students and Post-doctoral researchers • Proactive and flexible mechanism to attract quality faculty and researchers • Establish proactive board of studies and academic council	• 1ConferenceatInstitutelevelperyear • 2PhDstudentsperyear • Framing of Multidisciplinary research teams as much as possible

6.7 Community Engagement

S.No	Goal	Present Status	Strategy	Expected Outcome
1	Technology based projects for societal issues	A few projects have been done.	Identification of societal issues to be solved using technology. Effective utilization of resources of TBI and departments	One project per department per year
2	Educating the public	SVPCET NSS Unit is engaged in activities. About 5 programmes or events conducted every year through NSS, Women Empowerment Cell etc.	More programmes useful for the community like healthcare, agriculture, technology issues, etc. to be conducted. Short-term Courses/Workshops/ Skill based programmes for Women, senior citizens, un employed youth, etc. The events may include: Rallies, fundraising programmes, programmes. To associate with NGOs and self Help Groups	About10programmesorevents /year. Establish community radio
3	Programmes for less privileged children/orphans	A few programmes conducted by NSS.	Motivation of faculty and students for good cause. May be included in the association plan of all departments. Connect with governmental agencies and NGOs	4 events/ programmes/ contributions.
4	Social Service (Blood donation, Eyecamp, Health camp, Environmental camp etc.)	NSS conducts blood donation camps, Tree plantation drives. Awareness on plastic-free society	Awareness creation among students, staff, faculty. Green Clean campus	Two Health campus per year Two environmental campus per year.

7.0 Conclusive Remark

The strategic plan document developed will serve as a monitoring tool for self- appraisal at various levels and also be a guiding document from the Management up to the Staff level. Periodical reviews to assess the achievement level vis-à-vis the plan and take necessary corrective action is called for. It is expected that with sustained efforts, involvement, monitoring and support, it is possible to reach the goals set in this document during the plan period.