Strategic Plan
2021-27

About us

Lokmanya Tilak Jankalyan Shikshan Sanstha (LTJSS) founded in the year 1983. It is a conglomerate of 28 Educational Institutions which is considered as a paragon of excellence in Education. This lofty group derives its philosophy and inspiration from renowned historian, eminent mathematician, educationalist and social reformer Lokmanya Bal Gangadhar Tilak. Priyadarshini. Bhagwati College of Engineering (PBCOE), Nagpur, is a flagship institution of LTJSS established in the year 2007 and is one of the premier technical institutions in Central India. It is having an exquisite location in the city limit, on the State High way having spacious buildings, gracefully planned landscapes with lush and subtle green lawn and ample parking area.

◆ The institute imparts education and training in 5 diverse verticals of engineering streams at undergraduate level and two at Postgraduate level.

◆ The institution is accredited by National Assessment and Accreditation Council (NAAC).

◆ Priyadarshini Bhagwati College of Engineering the premier Institute of Sanstha with 14 years of promising track record endeavours to impart academic excellence by promoting technology, scientific thinking and corporate social responsibility.

◆ The institutes has always envisioned of instilling life skills among the students through their qualitative engagement in various extracurricular activities like NSS, inter collegiate sports and cultural competitions and has won several accolades at university level and state level. Various cells like Alumni, EDP, III, are strong support to the Training and Placement cell so as to give much needed impetus for the meaningful placements of students.

◆ Various activities like Soft Skill Training (SST), Employability Enhancement Training, Campus to Corporate (C2C), Campus Recruitment Training (CRT) are very much helpful for students to gear confidence and etiquette to perform in various vertical of their personal and professional career.

◆ The institute is an attractive destination of learning which galvanize the potential learners from Maharashtra and nearby states of Maharashtra. State of the art infrastructure and unfailing commitment to achieve excellence in academics and research are our principle drivers of growth. The positive brand image of the Institute is an enabler which has produced more than two thousand alumni who are occupying respectable positions and rendering professional services across the geographical borders. We proudly count on our alumni as our brand ambassadors.

- Honourable Chairman of LTJSS Dr. Satish Chaturvedi is a highly educated and well known personality who has achieved the most covetous degrees like Ph. D and D.Litt. for his outstanding scholastic contribution in the faculty of social sciences.

- Head of the institute Dr. N.K Choudhari is B.E, M.Tech, Ph.D. (Electronics Engineering) and has 31 years of teaching and administrative experience.
  He is a recognized supervisor for Ph.D (Electronics Engineering) at RTMNU Nagpur and supervised 16 research scholars. He is recipient of many awards namely VIDYA RATAN" award, "Best Principal" award, "Outstanding Leader in Higher Education" award, etc. He had reviewed research paper for reputed international journal published by Elsevier. He has patents on his name and published many research papers in National and International journals and conferences.

Vision:

To be a leading institution ensuring Academic Excellence, Nurturing Research, Innovation and Entrepreneurial Attitude to produce employable technocrats for service to society.

Mission:

1. To be a student centric institute imbibing experiential, innovative and lifelong learning skills, addressing societal problems.

2. To create a conducive ecosystem for Research, innovation & extension services.

3. To inculcate entrepreneurial attitude and values amongst Learners.

4. To Collaborate with Industries and other institutions to strengthen symbiotic relations.

5. To inculcate high ethical and moral values among the students.

Quality Policy:

To initiate, design and execute the processes for improvement of academic excellence at learning and execution levels and continually strive to achieve the highest possible outcome based objectives.

Core Values

Respect

Showing respect is a very important component of both personal identity and interpersonal relationships. To get respect could be considered a basic human right. Furthermore, respect moves us to understand the unique contributions of every person in the society as well it leads us to value diverse perspectives. Hence, in our college.practicing this value would play a pivotal role.Respect is the essential foundation for working collaboratively. Institute recognizes the expertise of teaching and non-teaching staff and respect their contribution towards the institution. Institute value and

respect the efforts of the staff as they contribute to the wellbeing of the society. Day to day interactions with students, colleagues, parents and other stakeholders are conducted honorably and respectfully.

Excellence

Excellence is a talent or quality which surpasses ordinary standards. It is also used as a standard of performance. At our Institute we strive to develop higher benchmarks by exhibiting quality in staffing, facilities, programs, and services by promoting continuous improvement and encouragement in interdepartmental collaboration among students as well as faculty.

Accountability and Transparency

In our institute we endeavour towards developing an atmosphere where every member takes responsibility for personal and professional growth. We often assess and enhance our policies to establish and impart characterized and explained objectives which ensure that our work increases the value of the college and society. We believe in having complete transparency at all levels of hierarchy to promote a healthier working and learning atmosphere to students as well as faculty.

Encouragement

Encouragement helps our students to develop critical thinking, effective communication, ethical decision making and social obligation. In addition to that through encouragement our institute is able to produce a highly productive staff which will help us to achieve our organizational goals and vision. Hence, we as an Institute work in the direction of a motivated environment for staff and students.

Leadership

Leadership motivates the people to a higher level of performance through their strong human relations. Leadership is an important function of management which helps to maximize efficiency and to achieve organizational goals. In fact leadership is an essential part and a crucial component of effective management. At our institution we mould our students as leaders who excel in addressing the challenges of 21st century. Furthermore in our students we cultivate critical thinking, creativity and joy of lifelong learning to serve the society with whole heart and soul boldly

Objectives:

- To ensure all-round development of students by providing various co- curricular, extra-curricular and entrepreneurship skill development opportunities
- To enhance research culture among the faculties and students, by providing latest research facilities and industry Institute interaction.

- To inculcate moral integrity in students and make them socially responsible good human beings.
- To develop leadership qualities and an ability to work in a team, by encouraging the students to participate in various activities.

SWOC Analysis

Strength:

- Proactive visionary management
- Qualified, competent and dedicated faculty
- State of the art infrastructure
- Active MoUs with reputed industries and institutes
- Financial support by means of various scholarships
- Office automation system for academic and administration process
- Conducive environment for teaching learning process
- Pollution free environment
- Support for research through research culture
- Value added/life skill courses

Weakness:

- Research grants from funding agencies
- Functional MoUs with foreign universities and organizations
- Students with poor communication skill at entry level.
- **Few publications in indexed journals and high impact factor journals**
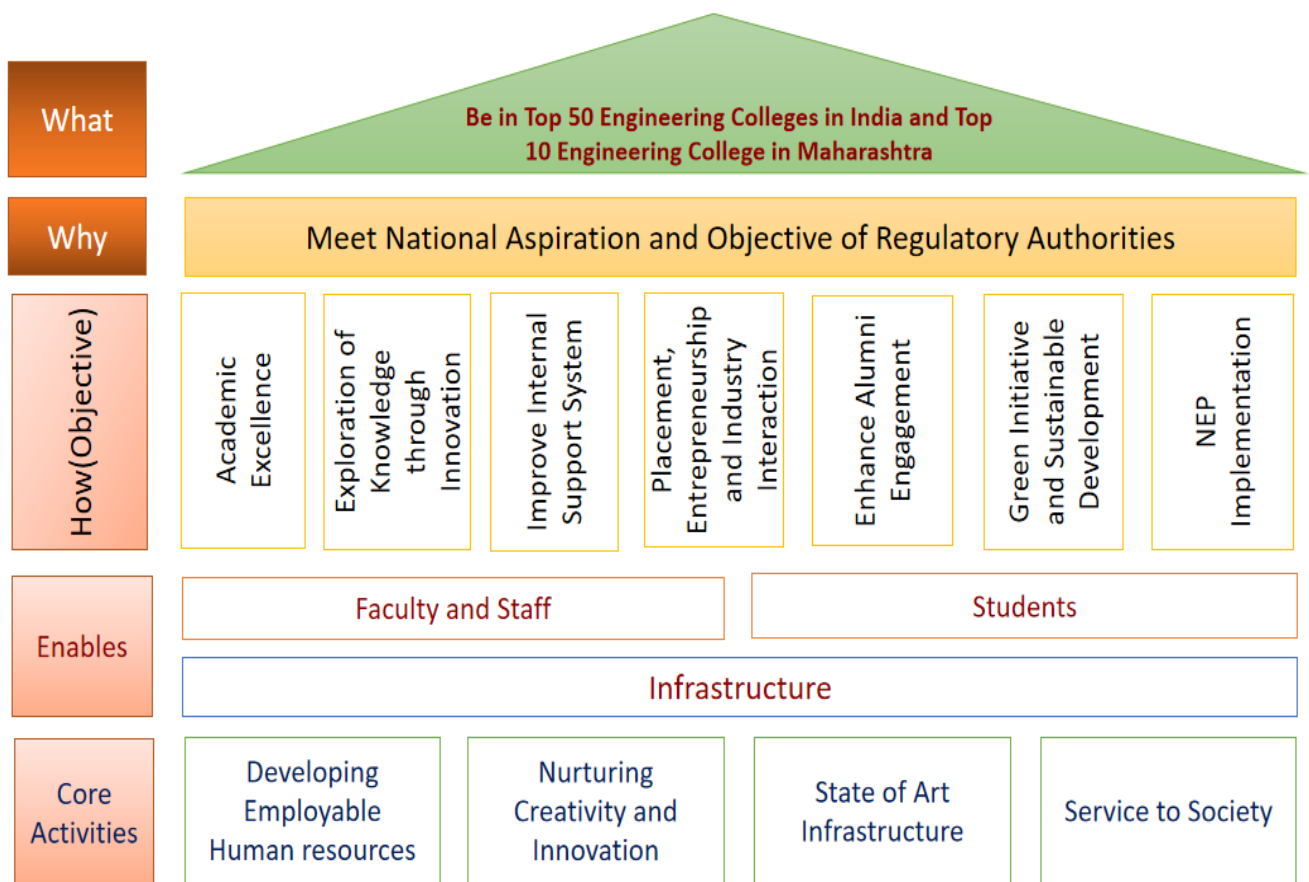
Opportunities:

- Starting of new UG programs
- Accreditation of programs by NBA
- Getting autonomous status
- Interdisciplinary research activities.
- Organizing International conference.
- Faculty exchange programme with international organization
- Revenue generation through consultancy and research projects
- Improving NIRF ranking

Challenges:

- Varying trends in admission for technical education
- Higher cost of engineering education
- Develop multi-disciplinary and inter-disciplinary courses and programmes
- Developing patents and good research teams in every department

- Achieving placement opportunity to every student
- Coping up with rapidly changing technologies.
- The rigidity in academic structure and curriculum since our institute is an affiliated institute.
- Diverse socioeconomic background of students.

STRATEGIC PLAN 2021-27

What	Be in Top 50 Engineering Colleges in India and Top 10 Engineering College in Maharashtra						
Why	Meet National Aspiration and Objective of Regulatory Authorities						
How (Objective)	Academic Excellence	Exploration of Knowledge through Innovation	Improve Internal Support System	Placement, Entrepreneurship and Industry Interaction	Enhance Alumni Engagement	Green Initiative and Sustainable Development	NEP Implementation
Enables	Faculty and Staff			Students			
	Infrastructure						
Core Activities	Developing Employable Human resources		Nurturing Creativity and Innovation		State of Art Infrastructure		Service to Society

Goal 1: Academic Excellence

Values-based Education creates a strong learning environment that enhances academic achievement and develops students' social and relationship skills that last throughout their lives. The positive outcomes are achieved through teaching-learning methods blended with ethical values and cross domain research in cutting edge technologies. This leads to the all-round personality development of the students. It also provides social capacity to students, equipping them with social and relationship skills, intelligence and attitude to succeed at every aspect of their lives. A high quality of academic excellence can provide value-added experience for the

students.

Strategies:

1. **Curriculum Enrichment and Value Addition**

   Being an affiliating College the HEI has insignificant role in curriculum designing and development. However measures have been taken for Industrial certificate Course, Value added courses and activities sensitizing students to cross-cutting issues such as gender, environment and sustainability, human values and professional ethics, development of creative and divergent competencies.

2. **Pedagogy and Delivery Modes**

   The day to day classroom delivery is through modern pedagogy evenly balancing the traditional methodology. The classrooms are equipped with the required infrastructure to facilitate the new modes of delivery. The faculty are trained on the ICT methodologies and continuous apprise of the same is provided through conduct and participation in faculty development programmes, workshops and seminars. An exclusive teaching/ learning center is in place to support faculty teaching, student learning and communication. E- learning / online learning will be encouraged in addition to the traditional class room teaching-learning practice. Faculties and students are encouraged for MOOC- SWAYAM-NPTEL Certification.

Metrics / Measures

Key Result Areas	Measures
Curriculum Enrichment	Industrial Certificate Courses
	Courses focusing on Skill development and Employ-ability
	Value Added Courses
Learner Centric Curriculum delivery	Academic Plan as per OBE & Academic calendar
	Quality projects
	ICT utilization / Pedagogy Tools
	Online Self learning Resources
	Industry exposure through Internships
	Workshops/FDPs on Pedagogy/Technology
	Learning Management System
Smart Classrooms	Multimedia and support equipment
	E-Learning Facilities.
Laboratories	Periodic maintenance and up gradation
	Virtual Laboratory

	Additional Design and open ended experiments

Goal 2: Exploration of Knowledge through Innovation

The Institute addresses and enhances students' imagination, initiative and practical skills and equips them to innovate and confidently cross the threshold of challenges**.** Added to the academic activity additional open ended experiments, Micro/ Mini Projects, Industrial based projects, Product based projects are encouraged. The innovative idea of students are transformed into reality by:

- **Project Based Learning from micro to macro levels involving processes and products.**
- **Enhancing collaborative projects with academic institutes, industry.**

Metrics / Measures

Key Result Areas	Measures
Research Publications	Numbers of papers published in reputed National and international journals
	Numbers of papers presented in reputed National and international conferences
	Faculty as reviewers for reputed journals
Frontiers of knowledge	Operational Centers of Excellence
	Conferences/seminars/workshops conducted.
	MOUs with industries and higher learning institutes.
Patents and copyrights	IPR Workshops
	Number of Indian Patents
	Books and Monograms, Copy rights

Goal 3: Improve internal support systems

The Institute has installed a modern and comprehensive Enterprise Resource Planning (ERP) system after streamlining all processes with the aim of improving efficiency and transparency of operations. The number of technical staff in the departments will be increased, including senior staff with higher qualifications. The Institute will provide additional administrative staff to departments to manage routine work such as, arranging admissions and examinations, maintenance, recording minutes of meetings, as well as specialized activities such as publishing newsletters, maintaining website and engaging with industry and alumni.

The Institute will enhance the purchase section to provide greater support for facilitating

purchases in a timely manner. A conference/FDP/STTP course support cell will be set up to help arrange conferences/ FDPs/STTPs. The Institute will provide adequate staff and online systems to enable maintenance of the estate and buildings at a higher standard.

Action points

- Simplify systems and processes with a modern ERP system.
- Appoint and empower departmental managers to support and co-ordinate purchase, maintenance and administration in the Department.
- Conduct annual satisfaction survey.
- Service orientation and training for staff, service response and online complaint systems.
- Establish improved faculty orientation and mentorship programme for new faculty members.
- Create a conference organizing support cell as a part of CEP.

Metrics/Targets

- Reduction in average processing times
- Continuous improvement on satisfaction survey scores
- Tracking and reduction in complaint redressal times

Goal 4: Placement, Entrepreneurship and Industry Interaction

The Institute aims to create an ecosystem for deeper collaboration with industry in several modes, including consultancy, sponsored research projects, technology transfer and continuing education. Measures are taken to transform classroom learning to a project based experience. The idea to innovate is encouraged through the **Innovation Competition** and the best idea is rewarded. Infrastructure is provided to implant the ideas. Young technocrats get opportunities to exploit their full potential by setting up their own ventures thus becoming "job generators" rather than "job seekers". Strategy to provide a platform to business Start- ups to develop the innovative ideas into commercially viable products.

Training and mentoring to the students is given through **Entrepreneurship Development Cell** to realize the idea into application/ product at institute. Initial awareness on entrepreneurship is facilitated by conducting awareness camps, guest lectures, seminars, workshops, and skill development programmes.

The **Industry Institute Interaction** Cell proactively builds partnerships with industry in areas of strengths of the Institute. Collaboration with the industry is built through well-structured student internships and appointment of industry professionals as Visiting Faculty. A significant quantum of research will originate from problems identified as a result of the faculty's

engagement with industry.

Metrics / Measures

Key Result Areas	Measures
Industry Collaboration	Industry Supported Labs
	Student Internships
	Knowledge exchange through seminars and workshops
	Faculty as Corporate Trainer
	Consultancy and Testing to industry
	Sponsored and funded collaborative research
	MOUs with Premier industries
Innovation and Entrepreneurship	Exclusive incubation facility
	Proactive participation of Students and Faculty
	Focus on Product development
Resources & Infrastructure	Exclusive facility for R&D
	Licensed Technologies

Goal 5: Enhance Alumni Engagement

Alumni have been key stakeholders in the Institute's evolution and growth. Alumni achievements have been a source of pride for the Institute and have contributed significantly in society. Plan for active alumni chapters in various cities in India and several initiatives from the alumni to support some of the Institute goals. Donations from the alumni will result in creation of new infrastructure (convention centre, innovation centre) and support towards student facilities and counseling. The Faculty Alumni Network (FAN) will help the Institute in identifying and attracting young researchers and academics to faculty positions at the Institute. The Institute has Distinguished Alumnus. The Institute conducts several events to engage with alumni. A dedicated committee manages alumni interactions. The Institute will make efforts to enhance the engagement with all alumni. The focus will be on a two way interaction.

The Institute is committed to lifelong involvement with all students who will continue to be part of PBCOE family even after they graduate. The Institute will build its engagement on adding value and support to the alumni in their careers and professions with specialized training, lectures, access to the latest research and help with networking. The Institute will welcome alumni visits to departments and will provide opportunities for alumni to interface with students and faculty and participate in the research and educational activities at the Institute.

Action points

- Create an Alumni Centre at the Institute to support alumni visits, activities and engagement.
- Initiatives for supporting alumni needs for continued learning and career improvement. Lifelong Learning Modules targeted for Alumni.
- Multiple interaction modes such as, interaction between alumni and students, mentoring, interaction between alumni and faculty, alumni inputs for curriculum development, alumni support for student placements and internships, alumni involvement in Department Advisory Committees and in enhancing the innovation ecosystem at DIET.
- Engage alumni as adjunct faculty.

Metrics/Targets

- Number of alumni visitors to Alumni Centre and the Institute: 100 per year
- Number of meets/networking events for alumni: 3-4 per year

Goal 6: Go Green Campus

The Institute is committed to grow sustainably and develop as a model clean, green campus. The existing Green Campus Committee which consists of representatives from students, faculty and staff decides campus policies to promote sustainable practices and maintain the flora and fauna of the campus. This committee will be supported by a cell that will monitor, implement and enable the policies and initiatives of the Committee. Initiatives will include smarter buildings, energy efficient appliances, increased use of renewable energy, improved solid waste and waste water management systems, increased recycling, and making the campus more pedestrian and cycling friendly. The campus will move towards a reduced energy and carbon footprint (low carbon campus) campus. New innovative technologies for energy, waste management and emissions control will be showcased on the campus and their viability will be assessed.

Action points

- Low carbon campus growth.
- Involve students in campus planning including green campus initiatives.
- Monitor metrics by creating a network of sensors and report sustainability metrics.

Metrics/Targets

- Setup a cell which will monitor, implement and enable policies and initiatives of the Green Campus Committee
- Establish Green Campus metrics and work towards reducing carbon footprint water footprint, energy footprint
- Improvement on green metrics

Goal 7: NEP Implementation

A new national education policy 2020 as announced and being implemented as per the directives of ministry of education and human resource development, the institute shall leave no stone unturned to adopt the same in letter and spirit. Below mentioned are some of the indicative measures the institute will embark upon to honour the spirit and intent of NEP 2020. The institute shall not embrace any hard separations between Sciences, Humanities and engineering, between curricular and extra-curricular activities, between vocational and academic streams. The institute shall adopt assessment reforms for holistic assessments of the learners. The institute shall adopt and will become an active member of PARAKH(Performance Assessment, Review, and Analysis of Knowledge for Holistic Development) The institute will ensure equitable and inclusive education with a special emphasis given on socially and economically Disadvantaged Groups(SEDGs) The institute will adopt full scale learner centric teaching learning model. The institute will adopt robust and transparent processes for recruitment of teachers and merit based performance. The institute will ensure availability of all resources in the campus and through the clusters. The institute will ensure exposure of vocational education to all the learners. The institute shall abide by national target of gross enrolment ratio. The institute shall remain committed to holistic and multidisciplinary Education with multiple entry/exit options. The institute shall adopt establishment of Academic Bank of Credit. The institute will develop skill development workshops for all the learners.

Strategy Implementation and Monitoring

After approval of Strategic development plan the next step is its implementation. During implementation the progress of strategy shall be measured from time to time. Hence the measurable success indicators are clearly spelt out in the implementation document. Principal along with the other members of IQAC periodically review the strategic plan and its deployment.

Responsibility & Accountability for various activities at institute level

Apart from the heads of the department, various centralize cells are in action in the institute to monitor the activities at central level.

- IQAC (Internal Quality Assurance Cell)
- Anti-Ragging Cell
- Grievance Redressal Cell for Faculty
- Student Grievance Redressal Cell
- Internal Complainant Committee
- Training and Placement Cell

- Sports Cell
- Students Cell
- Alumni Cell
- NSS Cell
- Entrepreneurship Development Cell
- Industry Institute Interaction Cell
- Women Cell
- Faculty Development Cell
- Research & Development Cell
- Intellectual Property Right Cell
- Library Advisory Committee
- SC/ST Cell
- Teacher Guardian Cell
- Code of Conduct Cell

Monitoring Strategic Plan

The implementation of strategic plan is monitored time to time by Principal, IQAC through periodic review. The Departmental heads & committee coordinators prepare the detailed progress report and present it in the review meetings. The benchmarking of quality standards and its monitoring, evaluation of attainment is carried out by the IQAC independently. The IQAC report the findings to the principal. With thorough analysis of outcomes and based on IQAC report, corrective actions, need of further processes and deployment of resources has been done by head of the Institute. All these reports are forwarded for further discussions and approval to management & GC members.

(Dr. N. K. Choudhari)
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