

Strategic plan & deployment 2016-21



TIRUMALA ENGINEERING COLLEGE

An ISO 9001:2015 Certified Institution, Accredited by NAAC & NBA
(Approved by AICTE & Affiliated to JNTU Kakinada)

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Message

Tirumala Engineering College, Jonnalagadda, Narasaraopet, Andhra Pradesh , was established by Venkata Ramana Charitable Trust in 2008 aiming at becoming a pioneer in Technical Education in the private sector.

The Tirumala Engineering College was instituted by the society in jonnalagadda campus with an idea of opening an engineering college in the rural area. The college offers courses in Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering and Mechanical Engineering, Information Technology and Artificial Intelligence and Machine Learning. The instructional facilities are spacious, and the laboratories are continuously upgraded with state-of-the-art equipment. There are highly qualified and dedicated faculty members in the institution. The strategic plan & development-2016- 2021 would acts as supervisory document for the next five years to assess and improve the institution towards delivering high quality education there by earning due recognition. The focus of strategic plan & development would be on good governance, best in class teaching-learning, research & innovation and highly employable students who act as brand ambassadors for the institution and trained to students in technical skills while inculcating in them a sense of social responsibility, in tune with the vision and mission of the college.

I congratulate and commend the high-quality work done by the Principal, HODs, and Faculty towards developing Strategic plan & Development 2016-21.

Wishing all the success!

Mr. R. Sathyanarayana
Secretary and Correspondent

Preface

For an organization, strategic planning is very essential to accomplish the Vision and Mission, which it dreams of. Strategic planning is a continuous process with a specific focus on accomplishing institutional goals in this competitive world. Strategic Planning and deployment document is based on analysis of current obstacles and future opportunities and envisages the direction towards which the organization should move to achieve its set goals and objectives.

The first part of it addresses the vision, mission which the institute dreams along with core values, institutional long term & short-term goals. These are defined and guided by the stake holders (management, leadership, HODs, faculty, staff, industry, students, alumni and parents) through SWOC analysis. After analyzing the internal and external environment, the institutional goals were set up in all possible growth domains through continuous thought process and discussion with HODs and faculty members. The strategies with action plans were decided to achieve institutional strategic goals. While formulating the strategic plan and deployment document, care has been taken to involve all stakeholders to help contribute their part which is vital for the success of every organization. Effort has been taken to clearly identify the implementation processes and monitoring by identifying measurable targets in line with the desired outcomes. This will emerge to be the guiding force for TEC to achieve its goal to become an institution of Academic Excellence and providing professional by skilled young Engineers and Managers to the society.

Vision of the Institute:

To be a world class leader in transforming lives through an innovative, rigorous, and compassionate approach by imparting high quality academic excellence in technical education to uplift the living standards of the rural youth by promoting the cutting edge technologies, employability, higher education and research with socio-ethical, eco- friendly and entrepreneurial values.

Mission of the Institute:

To develop high quality technical personnel with a sound footing on basic engineering principles, innovative research capabilities and exemplary professional conduct to lead and to use technology for the progress of mankind, training and adepting them to changing technological environment by providing the high quality instruction, infra, faculty, effective teaching and learning methods imbibing socio-ethical, eco- friendly and entrepreneurial values as the inner strength.

Quality Policy:

We at Tirumala engineering college, strongly belief that Quality is the essence of life. Hence, TEC will constantly strive to improve the Quality of education and training imparted to its students by establishing state-of- the-art laboratories and modernizing them continually, upgrading the knowledge and skills of its staff periodically and developing strong linkages with industry.

Core Values:

Core values deliver the basis for all the academic, student and social programs and activities. The stated core values support the mission of Tirumala Engineering College.

- High quality technical personnel with a sound footing on basic engineering principles
- Innovative research capabilities and exemplary professional conduct
- Training and adapting them to changing technological environment
- Providing the high quality instruction, infra, faculty, effective teaching and learning methods.
- Socio-ethical, eco- friendly and entrepreneurial values
- Encouraging students to become productive, participating citizens.
- Support the mission and vision of the College.
- Focus on student and stakeholder needs.
- Recognize and support staff and student contributions.
- Create healthy atmosphere for effective teaching–learning process.
- Encouraging students to become productive, participating citizens.
- Sharing of experience, knowledge and skills.

Strength, Weakness, Opportunity, and Challenges (SWOC) Analysis

Institutional Strengths:

1. CSE branches is Accredited by NBA.
2. Socially conscious, humanitarian, far- sighted and visionary management
3. Located at the in rural area.
4. Highly qualified and experienced teaching and non-teaching staff with high retention ratio.
5. Membership with professional societies like IEEE, ISTE, IETE, CSI etc.
6. Wi-fi enabled campus.
7. Students' admissions have been consistently good.
8. Functional MoUs with industries and academic institutions.
9. Well- established and state-of-the-art laboratories with good infrastructure.
10. The administrative and management policies & controls are well-defined.
11. Students with good academic record in university ranks every academic year.
12. Registered Alumni Association.
13. Recognized and proactive NSS Unit.
14. Lush green environment-friendly, pollution- free, plastic-free campus to create an ideal study space

Institutional Weakness:

It takes proactive measures to improve the quality of teaching, learning, and research. Though the institute has scripted many success stories, there are certain areas in which it needs to move forward. There is a need to overcome the limitations in the following areas:

1. Research & Development is still need to be increased where the faculty paper publications and student publications in peer reviewed journals.

2. Adhering to affiliated status, the college has restrictions pertaining to the academic flexibility to address industry requirements.
3. R&D funding and consultancy activities need to be strengthened.
4. Establishment of laboratories through Institute Industry Collaboration.

Institutional Opportunities:

1. The location of the college will leverage the opportunity to have collaboration with Central/State Universities, industry and Research laboratories.
2. Collaborative research work can be carried with government sectors like ISRO, DRDO, NRSC, Texas Instruments etc.
3. Creating awareness among faculty members and students about the intellectual property rights and patent filling.
4. Strengthening the alumni network to provide more career development opportunities to the students.

Institutional Challenges:

1. With a wide range of career opportunities available in the Software / IT sector, attracting quality students to enroll in the core engineering branches like Civil, EEE and Mechanical Engineering has become a challenge.
2. Being an affiliated institution, meeting the industry demands and expectation with rapid change in technology has become a challenge.
3. Promoting sponsored research and consultancy as per industry requirements.
4. Imparting value-added courses and student exchange programs on niche technologies to bridge the curricular gaps in the stipulated time period of an academic year has always been a challenge.

Strategic Goals

Tirumala Engineering College Management team after brainstorming the vision, mission, quality policy, core values, environmental factors and SWOC analysis have reached the step of defining Institution Strategic Goals for 2016-21.

1.	Good Governance
2.	Entrepreneurship
3.	Accreditation & Certification
4.	Infrastructure and facilities
5.	Teaching & Learning
6.	Industry & Institute Collaborations (MOUs)
7.	Placement, Internships & Career
8.	Research & Development
9.	Alumni engagement and interaction
10.	Quality assurance systems
11.	Library & information centre

Strategic Planning (2016-2021)

Strategic Goal	Strategic Planning
Good Governance	<p>Governing Body:</p> <ul style="list-style-type: none"> ▪ Supervisory and approving policy matters, Staff Recruitments, annual budgets ▪ Evaluation of institutions academic performance and bench marking. ▪ Smooth Working of statutory committees.
	<p>Vision, Mission, and Institution Strategic Goals:</p> <ul style="list-style-type: none"> ▪ Vision, Mission progress & their delivery. ▪ Setting short term and long-term goals. ▪ Institutional Strategic development plan.
	<p>Leadership & Transparency management:</p> <ul style="list-style-type: none"> ▪ Policies formulation, approval & implementation. ▪ Service Rules circulations ▪ Student & Staff Grievance Redressal mechanism ▪ Decentralization of leadership managements ▪ Implementation E-Governance in administrative, Student support, etc., ▪
	<p>Internal Quality Assurance Cell& Accreditation:</p> <ul style="list-style-type: none"> ▪ Monitoring ▪ Conduct internal audit committee for monitoring compliance. ▪ Systems, checks and balances- Remedial measures.

Entrepreneurship	<ul style="list-style-type: none"> ▪ Establishment of dedicated EDC cell. ▪ Identification of emerging areas of entrepreneurship. ▪ Identify interested students for entrepreneurship. ▪ Identify mentors from successful entrepreneurs from Alumni/others. ▪ Formal training on entrepreneurship.
Physical Infrastructure	<ul style="list-style-type: none"> ▪ Upgrade the Classrooms, Tutorials, Seminar halls, conference halls. ▪ State of the art Laboratory & equipment ▪ up gradation Library infrastructure & e-learning ▪ Emerging sports (indoor/outdoor) facilities ▪ Strengthen Hobby clubs & Canteen facilities. ▪ Increasing Transport facilities ▪ Rain water harvesting and plantations. ▪ Developing facilities to improve the energy saving & management. ▪ Solid waste management (zero plastic usage) ▪ Developing facilities to efficient usage of recycled waste water.
Teaching & Learning	<ul style="list-style-type: none"> ▪ The improvements in teaching & learning infrastructure keeping in line the changing pedagogy and its implementation like aggressive adoption of ICT through improved facilities in classrooms, e-classrooms, skill development centers, laboratory, library, Wi-Fi enabled classrooms. ▪ R&D Laboratory and its maintenance
Library & Information Centre	<ul style="list-style-type: none"> ▪ Budget allocation for library & information centre. ▪ Books, journals procurement, storage, and retrieval ▪ Digitization of Library resources ▪ Resources automation & Access (24X 7)

Industry & Institute Collaborations	<ul style="list-style-type: none"> ▪ Formation of industry institute interaction cell ▪ Identify branch wise preferred industries & companies. ▪ Identification of potential areas of research ▪ MoUs with industries ▪ Support for internships, visits, trainings, guest lectures ▪ Providing opportunities for Industry based/sponsored projects. ▪ Providing career guidance & Strengthen training & placement. ▪ Establish centres of excellence & skill development centers. ▪ Professional bodies membership.
Internal Quality Assurance & Assessment cell	<ul style="list-style-type: none"> ▪ Setting up of IQAC team ▪ Intermittent checks and guidance ▪ Recognizing achievements & best practices ▪ Choose accreditation/certification agency. ▪ Establish academic audit process & audit teams.
Research & Development	<ul style="list-style-type: none"> ▪ Enhancing R&D laboratories in all departments. ▪ Dedicated R&D facilitation & documentation centre. ▪ Competent technical staff for R&D labs. ▪ Establishing centres of excellences. ▪ Establishing Consultancy cell. ▪ Startup of maker Space– Product and development. ▪ Focus on Product development. ▪ Starting of patent cell. ▪ Patent filing, Scaling up & commercialization.
Training & Placement	<ul style="list-style-type: none"> ▪ Setups dedicate T&P Team. ▪ Conduct Awareness programmes. ▪ Conduct Value added programmes.

	<ul style="list-style-type: none"> ▪ MOU s and relationship management ▪ Internships planning and execution. ▪ Developing Data base of various potential industries/companies. ▪ Modernisation of infrastructure (Video conferencing, interview & conference rooms).
Alumni Interaction	<ul style="list-style-type: none"> ▪ Strengthen Alumni association and engagement. ▪ Establish alumni association office on campus, engage students. ▪ Data base updation and interactive alumni website ▪ Establish global chapters and networking
Social Activities	<ul style="list-style-type: none"> ▪ Conduct awareness programs in villages/ communities. ▪ Conducting health awareness camps & Blood Donation camps.

Strategy Implementation and Monitoring

Strategic development plan once approved by Governing Body and the progress shall be measured from time to time through the IQAC. Hence the measurable success indicators are clearly spelt out in the implementation document. The principal along with academic council and other team member will be the custodian for strategic plan and its deployment.

Implementation at institute level

Particular	Committee
Good Governance & Administration	GB, Chairman, Members of GB
Finance & Account Management	Management & Finance Committee
Institution Complaint Compliance (IIC)	Principal, and HODs
Autonomous & University Affiliations	GB, Principal, and HODs
Infrastructure-Academics	GB, Chairman, Principal, HODs and In-charge Maintenance
Physical Infrastructure	GB, Chairman, Principal, Vice-Principal, HODs and Incharge Maintenance
Teaching- Learning	Principal, Vice-Principal, HODs, Faculty and Staff
Research & Development, Consultancy	Principal, Research Coordinators
Student affairs	Principal & HODs
Student admissions	Principal & Admission In-charge
Departmental activities	HODs and Faculty
Placement & Training	Principal, Placement & Training In-charge and TPO Team
Entrepreneurship	Principal and E&D Cell In-charge
Library	Principal, and Library Coordinator

Measurable during Implementation

Strategic Goal	Deployments
Good Governance	<ul style="list-style-type: none"> ▪ Governing Body selection ▪ Vision-Mission reviews ▪ Number of meetings conducted. ▪ Policies implementation. ▪ Student & staff procedures, ▪ Service & Conduct Rules ▪ ERP implementation, etc.,
Accreditation & Certification	<ul style="list-style-type: none"> ▪ In Academic years of 2019-20 CSE branch was NBA accredited ▪ The institute has ISO 2009:15 Certification.
Infrastructure and facilities	<ul style="list-style-type: none"> ▪ Upgrade the all the computers. ▪ Strengthen WIFI Facility. ▪ The entire campus installed CCTV cameras and fire safety equipments in each floor of the block. ▪ Adequate infrastructure is developed for extracurricular activities. ▪ Established RO unit and Potable water supply through coolers and dispensers is made available in every floor and block
Teaching & Learning	<ul style="list-style-type: none"> ▪ No. of learning resources ▪ No. of student counseling/mentoring/training sessions conducted. ▪ Result of examinations (Pass, First classes, Distinctions) ▪ Graduate attribute attainment levels ▪ Student feedback
Industry & Institute Collaborations (MOUs)	<ul style="list-style-type: none"> ▪ MOU's done with institute wise and department wise with different industries and organizations

Skill Development	<ul style="list-style-type: none"> APSSDC center is allotted to institution for skill enhancement of students by govt. of AP.
Student Clubs	<ul style="list-style-type: none"> Established students Clubs for various activities.
Research & Development	<ul style="list-style-type: none"> Established R&D Cell in the college with members from each department.
Training & Placement	<ul style="list-style-type: none"> Every Year Conducted Campus Recruitment Training (CRT) Classes with dedicated team. Tie-up with Pre-access test agencies Code Tantra, CoCubes, etc.
Certification	<ul style="list-style-type: none"> Received Dell EMC Centre of Excellence award. NIRF is in Planning Phase
Green Initiative	<ul style="list-style-type: none"> Rooftop Solar plant is installed. Electric car is provided in campus. Replacement with tube lights with LED lights

The Principal, Academic Council and other committees will be monitored implementation of strategic plan regularly. The various committee's in-chargers will monitor the improvement. The IQAC committee is intermittently monitoring, evaluation of attainment of strategic plan. The IQAC will report the findings to the Principal, Academic Council and GB. Based on IQAC report, the Principal, Academic Council and GB committee will recommend the corrective actions, need of further processes and deployment of resources.

Conclusion

The strategic plan & deployment is an effort for clearing a pathway towards achievement of objectives of Tirumala Engineering college dreams to accomplish. Simply defining the essential arrangement doesn't guarantee a good outcome, however it gives a directing structure which is an aggregate exertion conveyed by the cycle of participative brainstorming of stakeholders. The appropriate execution of strategies through collaboration with great soul prompts achievement and manageability throughout a more drawn-out time through a powerful cycle. It needs continuous evolution to incorporate the lessons learnt during the implementation and emphasizes the role of IQAC in ensuring the quality of implementation.