PAAVAI
ENGINEERING COLLEGE

(AUTONOMOUS)

NH-44, Paavai Nagar, Pachal, Namakkal - 637 018.

(Approved by AICTE Government of India | Affiliated to Anna University, Chennai)

STRATEGIC PLAN 2020-2025

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PAAVAI ENGINEERING COLLEGE

(AUTONOMOUS)

STRATEGIC PLAN 2020-2025

Preface

This Strategic Plan of Paavai Engineering College will serve the purpose of the Institute towards a set of common goals so that the sum total of our efforts and achievements is much more than our individual contributions. Through the strategic road map, the Institute is committed to deliver excellence in educational experience and nurture its dedicated faculty and aspiring students. The plan outlines the institute goals to be achieved in academic, administrative and management field. The strategic plan and deployment is circulated to all the departments. Suggestions, feedbacks and requirements from the management, principal, committees, faculties and staffs are considered while preparing the strategic plan. Utmost care has been taken to spell out clearly the goals and implementation plans to achieve the desired outcomes. This will help in focusing our minds on the years ahead and to develop clarity regarding our objectives.

Preamble

Paavai Engineering College (PEC) was established in the year 2001 by Paavai Educational Trust. The institute is an autonomous and affiliated to Anna University, Chennai. It was established with the sole objective of striving to be a globally model Institution all set for taking 'lead-role' in grooming the younger generation socially responsible and professionally competent to face the challenges ahead. PEC has become one of the Premier Engineering College in the city for offering various Undergraduate and Post Graduate Courses including B.E., M.E., M.B.A and M.C.A. under CBCS stream.

The college commenced with the humble beginning of 120 students with 3 branches of Engineering (B.E-- Electronics & Communication Engineering, B.E. - Computer Science & Engineering, B.Tech. - Information Technology and now the institution has been growing from15 U.G. Programmes, 7 P.G. Programmes and 4 Ph.D Research centers. At present there are more than 3000 students and around 350 faculty members on roll. It is approved by AICTE,

New Delhi, affiliated to Anna University, Chennai and accredited by NBA and NAAC (UGC) with A grade, New Delhi

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.

PEC is a threshold of knowledge & high learning is a premier professional establishment that has curved a niche for itself not only in the field of technical education but in the field of but in management studies as well. PEC offer an impressive system of education which is respected by many companies in search of the finest talent across streams. The reason behind this is that right from its conception, it was strategically planned to emerge as a centre of excellence The PEC culture is a blend of professionalism & value. Campus life is vibrant & full of enthusiasm along with self-disciplined environment.

Vision

To strive to be a globally model Institution all set for taking 'lead-role' in grooming the younger generation socially responsible and professionally competent to face the challenges ahead.

Mission

- To provide goal- oriented, quality – based and value – added education through state – of – the – art technology on a par with international standards.
- To promote nation – building activities in science, technology, humanities and management through research
- To create and sustain a community of learning that sticks on to social, ethical, ecological, cultural and economic upliftment.

Quality policy

Paavai Engineering College strives to be recognized as a centre of excellence for learning in Engineering, Technology and Management. To achieve this we are committed to:

- Continuously improving the quality of education and maintaining the institution as an effective human resource development organization under all changing environment.

- Pursuing Global standards of excellence in all our endeavours namely teaching, research and consultancy.
- Contributing to the nation and beyond, through the state-of-the-art technology, by producing vibrant technocrats, outstanding engineers and excellent managers who are ever willing to work to the spirit of challenge and innovation with high ethical and professional standards.

Highlights

- Our college has received All India level First Rank – Best Internship Record from AICTE- Internshala for the past three years
- Stands in Top Ten position in TNEA counseling for the past three years
- Our college has received, "Top Innovative Research Institution Award" from CII-Industrial Innovation Award 2021
- Paavai has been categorized as Band B institution (All India rank between 26 to 50) in ARIIA – ATAL Ranking of Institutions on Innovation Achievements 2020
- Paavai has been categorized as Band performer in ARIIA – ATAL Ranking of Institutions on Innovation Achievements 2021
- Paavai has received CII-Platinum status for consecutively six years
- Received the "Most Innovative Award South Zone" record jointly organized by AICTE and Internshala.
- Our college has received a certificate of appreciation as a Gold Member of British Council Exams Partnership Programme for conducting BEC courses
- Paavai has been awarded "Champion of Champions Trophy" consecutively for six years in the Anna University Sports and Games Competitions
- The Director and The Principal got Best academic director award and Best Principal award.
- Our HoDs and Faculty members received Best researcher award, Outstanding award for HoD etc from various agencies
- Our faculty members received Best faculty advisor award from ISTE Tamil Nadu section
- "ICTACT Youth icon award" was received continuously for two years
- Our College has received Best student chapter award from ISTE Tamil Nadu section

- Students of NSS volunteers got “INDIRA GANDHI NATIONAL AWARD” from the President of India

SWOC ANALYSIS

Based on the overall analysis of the Institution

Institutional Strength

- Centers of Excellence such as CNC vertical Machining center, TVS Haritha, Texas Instrument
- Laboratory are established to promote research culture in the college.
- Business Incubation Centre been established under MSME, Govt of India
- Paavai Engineering College has established MoUs with Taiwan Universities for promoting research, internship and student exchange programmes
- Research Development and Growth in terms of several outcomes
- Research facilities are provided and University approved research centers
- Exclusive Training & Placement Cell with adequate facilities for training
- Alumni engagement for the college growth & development
- The students are provided with amenities like Gym, sports and games facilities, medical facilities to create a work culture of utilization of resources beyond the working hours.
- Paavai Excellent indoor and outdoor sports facilities
- Innovative facilities like Entrepreneurship development cell, Institution Innovation council-MHRD have been established.
- Centre for Foreign language has been established. The language such as Japanese, German, French and Mandarin has been taught to students
- Exclusive Faculty Development Department has been established to look in to the matters of teaching learning process

- Wi-Fi facility with e-learning resources on campus LAN and web connectivity.
- Fee waiver policy for merit students and sports quota students
- Green and eco-friendly campus
- Outreach and extension programmes are extensively carried out regularly

Institutional Weakness

- Rural background students with moderate cut off marks.
- Poor Communication skill of students: As most of the students are from rural background, their communication skills need to be improved
- Entrepreneur awareness is less in the students.
- R&D in cutting-edge technologies needs to be enhanced.
- Potential of networking with other institutions is not fully explored.
- Industrial consultancy is to be strengthened considerably

Institutional Opportunity

- Inter-disciplinary research and collaboration with other institutes to develop effective engineering solutions for the problems in the fields of artificial intelligence, robotics thermal solar power, IOT, Deep learning, Machine Learning, 3D printing and so on.
- Probability of offering electives and add on courses in the emerging areas in collaboration with industries
- Transform pedagogical practices and adopt latest technological relevant courses in curriculum
- An opportunity for student internship for all students of all streams.
- Collaboration with more foreign Universities for student exchange programmes
- Establishment of Centre of Excellence for research, training and development in collaboration with industries and research laboratories in the specialized areas

Institutional Challenge

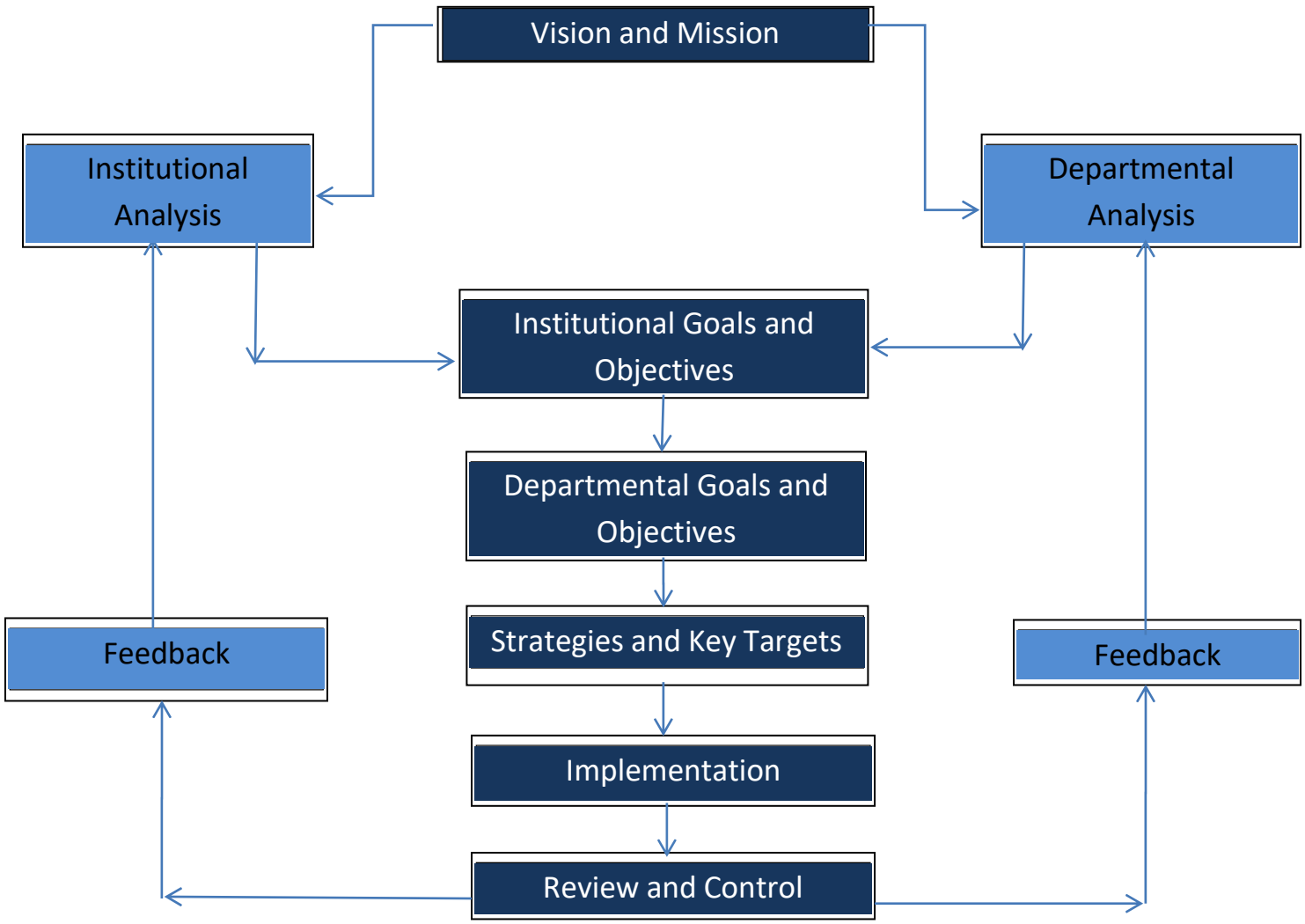
- Declining interest in traditional (Mech, Civil, EEE) programs by students
- Inspite of providing opportunities for higher education such as special coaching through Paavai IAS academy, Foreign languages such as German, French, Mandarin and Japanese through Centre for Foreign languages and MoUs with foreign universities, students prefer only placement rather than Higher education due to their family background and financial constraints.
- To develop the language proficiency levels of the students with Tamil medium background and make them reach the expectations of the industry.
- Ensuring all the students employable
- Attracting meritorious students.
- Addressing academically weak students.

1. STRATEGIC GOALS

Strategic goals of the institute were formulated after a brain storming session with Management, Principal, Dean Academics, IQAC Co-ordinator, HoDs and Faculty members. After analysing the vision, mission, quality policy, core values, future goals, SWOC analysis, internal and external environment, the strategic goals were set up in all possible growth domains.

Strategic planning of Paavai Engineering College is proposed as a key tool for a more rational and systematic approach to bring about the necessary changes for greater internationalization in institutional direction and daily operations. Our College believes in the integration of teaching with research, in the freedom and responsibilities that staff members, in acting with integrity, and the value of an inclusive and diverse community. The core competencies, strategic challenges and strategic advantages are determined primarily through the interaction with faculty members through Department meetings and by means of exit survey, alumni survey, employers survey. The Governing Council and Department Advisory Committee are two main important academic bodies of the institution. Meetings are held frequently while planning programs and discussing key issues in reaching the vision and mission of the institution.

STRATEGIC PLAN



Strategic Goals of the Institute

1. Getting Accreditations from statutory bodies.

2. Ensuring good governance.

3. Ensuring student and faculty development and their participation.

4. Enhancing effective teaching and learning process.

5. Continuous Internal Quality Assurance System.

6. Increasing Industrial and Alumni Interaction.

7. Encouraging Research, Development and Consultancy work.

8. Generating funds and grants from various schemes and policies of government and non-government organisation.

9. Ensuring Social engagement and Community service.

10. Encouraging Skill Development.

11. Enhancing Physical infrastructure, laboratories and other facilities.

2. STRATEGIC PLANNING AND DEPLOYMENT

Paavai Engineering College strategic plan includes the following for the years 2020-2025

- **CURRICULAR ASPECTS AND TEACHING AND LEARNING**
- **RESEARCH AND DEVELOPMENT**
- **INFRASTRUCTURE DEVELOPMENT**
- **STRENGTHENING FACULTY AND SUPPORTING STAFF**
- **STUDENTS DEVELOPMENT**
- **INDUSTRY and INTERNATIONAL COLLOBORATION**
- **GOVERNANCE**
- **EXTENSION ACTIVITIES**
- **BEST PRACTICES**

3. CURRICULAR ASPECTS AND TEACHING AND LEARNING

S.No	Plan	Strategy	Target	Current status
1	Interdisciplinary projects/ multi-disciplinary projects	The departments would collaborate for their projects for social benefits	To implement for all departments	Implemented
2	To offer one or two Professional core courses with an equivalent online course	It was discussed with all HoDs to offer Professional core courses with an equivalent online course such as MOOC/NPTEL/Swayam	To implement 5% to 10% of Professional courses with an equivalent online course	Implemented
3	Introducing Innovative pedagogy	Design thinking/ Flipped classroom, Cross over learning and Experiential learning	At least one activity per course per year	ICT in pedagogy is practiced throughout the Institution
4	Developing e-content for all courses	Developing videos and smart learning material	Any 2 e-content per department per year	E-content is available for all the courses
5	Enhancing multi - disciplinary approach in curriculum	Offering multi-disciplinary projects/Open Electives	Two multi-disciplinary project/ Open Electives per department per year	Open elective is in practice
6	Providing personal and career mentoring to students	Enhancing the Mentor-Mentee system	Meetings need to be conducted per department, and coaching classes and remedial classes should be increased as needed.	Mentor-Mentee system is in progress

4. RESEARCH AND DEVELOPMENT

S.No	Plan	Strategy	Target	Current status
1	R&D Grants received	Focus more on multi-disciplinary research. Every faculty member with Ph.D. qualification shall apply for a minimum of one funded research project per year	Minimum 2 crores funding for five years from external funding agency	121 Research Projects have been Sanctioned (161.74267 Lakhs)
2	Sponsored Research Programme Organised /FDPs	To motivate the departments to apply for conducting FDPs through various funding agencies (Govt/Non-Govt/Research institutes/ NGOs/Private industries)	Minimum 15 FDP /workshop for five years and 1 international conference per year	14 Number of Sponsored Programme Organised / FDPs organised
3	Publication	Publication of research work in Science Citation Index (SCI)/Scopus Journal	500 publications have been set for five years	Total 866 research and publications are done
4	Improvement of Citation Index	Quality publications will enhance citation index. Incentives can be provided for publications with high citation	Average Scopus indexed citations should cross 2 per paper	Total Google Scholar Citations: 2600

5	h-Index of an Institution	All faculty members are motivated to publish articles	To improve the h-index as 35	Currently h-Index is 45
6	Joint/Collaborative Research	The college motivates the department/ faculty members to establish MoUs with higher educational institutions/ research institutions and conduct collaborative activities	6 collaborative / joint research projects with lead institutions / R&D laboratories / industries for five years	12 Collaborative work is initiated and ongoing.
7	Patent/IPR	Financial support is provided for faculty members for IPR related activities	Minimum 15 patents should be filed per year. At least one technology transfer needs to take place and one patent to be commercialized.	Around 110 Patents Published
8	Centre of Excellence	Based on the core strength and expertise available, each Department is planned to establish one centre of excellence.	20 centers of Excellence will be established for the five years	20 Centers of Excellence established.
9	Research Centre	Based on the core expertise available, the eligible department need to apply for research center	Minimum 3 scholar should register in each centre and 3 more research centers will be established for the next five years	Currently 5 research centers are available, 26 faculty members are having guideship and 53 PhD scholars are pursuing.

5. INFRASTRUCTURE

S.No	Plan	Strategy	Target	Current status
1	Laboratory setup and up gradation	Purchase of new equipment as per up gradation of syllabus	Construct, establish new lab as per the programme requirement	Implemented and ongoing
2	Creating Teaching & Learning resource repository	Developing e-learning resource repository consists of PPTs, Videos, Q-bank prepared / compiled by Faculty members etc and to be kept for free access to students	A repository for every course should be created in each department . Video bank of content delivery by the faculty members will be created and will be uploaded in the MOODLE	Currently in MOODLE, faculty members upload their instructional material for the students to access at any time
3	Library access	To implement software tools, so that e-resources can be accessed remotely	Around 80% increase in library access by students and faculty every year	Library is accessed by the students and faculty members both on campus and off campus
4	Sports	To train more students for sports Internationally	Students will be motivated to participate international sports and competitions	All courts, gym, yoga center, Indoor stadium available Our college is the recipient of, “Champions of Champions trophy” for consecutively eight years in the Anna University sports board

6. STRENGTHENING FACULTY AND SUPPORTING STAFFS

S.No	Plan	Strategy	Target	Current status
1	Faculty Professional skill development	NPTEL/Online course completion Participation in FDP (more than 5 days) Acting as resource person-expert lecture, Chief Guest, chairperson, BOS member, etc Organizing FDPs/ Seminars/ Conferences-Sponsored /self supporting and professional society activities	One per year per faculty One per faculty per semester All faculty members Atleast one faculty per department Minimum 2 activities per department per year	50% faculty members undergo online course, and all the faculties participate in FDPs
2	Faculty Induction and Pedagogical programme	Induction programme for newly recruited faculty members 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 Minimum one activity at institutional level per year	One Induction programme for newly recruited faculty members Class observation and feedback is given to faculty members Faculty revalidation programme for the audit of teaching performance of the teachers

7. STUDENTS DEVELOPMENT

S.No	Plan	Strategy	Target	Current status
1	Placement	Conducting core/ software training programmes Inviting a greater number of tier-I companies for placement	Minimum 4 programmes per department 90 % of placement at institutional level/ departmental level	Training programmes are conducted all the eligible students Currently 92 % of the students are placed in reputed companies
2	Student Participation in Innovation programmes	To motivate students to develop innovative projects and apply for project proposals to various agencies for Funds To Make students to participate in various hackathon, ideathon to develop into projects	Minimum 2 projects per department to be scaled up to product	Paavai positioned in the Band 101-150 in the NIRF and Ministry of education for Innovation Category and Platinum Status recognition by AICTE-CII for 7 consecutive years. Recognized as Mentor Institute by Ministry of Education, AICTE-Institute Innovation Council with a grant of Rs 2.25Lakhs.
3	Competitive examination and Higher studies	Conducting awareness/ training programmes MoUs have been established	Minimum 10% of students would go for higher studies in each department Minimum 10% students	Currently 30 Students had got MS admission in Taiwan Universities with 100% scholarships and Rs 25,000 stipend per

		with foreign universities to provide opportunities for the students to study abroad	should appear for competitive examinations	month.
4	Entrepreneurship development / Promoting Start up	Conducting awareness and training programmes With the support of EDC cell, MSME incubation center, the space, resources and facilities can be utilized for their development of projects in to products	At least two per year At least 2 startup per year	EDC cell and Paavai Incubation cell under MSME is actively motivating students to establish their startup and currently, our college has an agreement signed with 23 Startup companies as an incubate.
5	Collaboration with Alumni	Conducting rejuvenation programme Creating a master list of renowned alumni in various categories such as Industrial expert, Academic expert, renowned entrepreneur. Conducting Alumni lectures	Setting up Alumni chapters in Metro cities in India and Abroad One activity per year for each chapter Two lectures per year per department	Our college has got registered Alumni association Conducting alumni meet every year and opened new alumni chapters nationally and internationally.

8. INDUSTRY AND INTERNATIONAL COLLOBORATION

S.No	Plan	Strategy	Target	Current status
1	Promoting MoUs	Inviting experts from more number of industries/higher education institutions at national and International level for collaborative work to share their expertise	At least 2 new MoUs per year in every department and 1 International MoU is planned At least two activities (Expert lecture/ Industrial Training, Internship, Industrial Visit, Industrial project) from each MoU in every year	There are 70 MoUs have been established currently with industries/ higher education institutions
2	Industrial Training/ Internship/Industrial visits for Students	To encourage students for Industrial visit, In-Plant Training and Internship	To improve students Internship Minimum 1 Industrial training/Industrial visit per year	Industrial Training/ Internship Industrial visits for Students is provided every year Internship through AICTE-Internshala has made mandatory for students and our college has received, All India Rank-I for best Internship record for consecutive 4 years from AICTE-Internshala
3	To improve Industrial Consultancy Activities	Problem identification/need from the industries, the ideation, then project,	At least two consultancy activities per department in a year.	Consultancy activities are carried based on the requirement of the industries. A total of 163

		process and product development		consultancy work are being carried out.

9. GOVERNANCE

S.No	Plan	Strategy	Target	Current status
1	Administration	To maintain all the data of the students and faculty members by developing an App	To create a paperless office by developing an App to maintain the details such as their attendance, leave, on-duty, FDP attended, timetable, classes taken and similarly for students, their attendance, leave, seminar presentation, Assignment submission etc	ERP software PALPAP is used to maintain the database of faculty members and students
2	Examination	To adopt the strategy which require for the needs of the curriculum and syllabus and also the according to the order of the day	Modified and updated based on the requirement of the curriculum and syllabus and also prevailing norms of the day	For examination purpose, Coxco software is used

10. EXTENSION ACTIVITIES

S.No	Plan	Strategy	Target	Current status
1	Technology based projects for societal issues	Problem Identification from societal issues by visiting the local area to be solved using technology.	Two projects per department	Maximum projects have been done for the benefits of society
2	Educating the public	More programmes useful for the community like healthcare, agriculture, technology issues, etc. to be conducted. The events may include: Rallies, awareness programme and fund raising programmes,	30 programmes per year	Around 5 programmes or events conducted every year through NCC, NSS, and TQI(Talent quest India)
3	Social Service (Blood donation, eye camp, health camp, environmental	More number of Programmes will be planned and executed	30 programmes per year	NSS conducts blood donation camps Tree plantation drives Awareness on plastic-free society Yoga day

	camp etc.)			Independence day celebration Republic day celebration Eye Donation Fortnight COVID-19 Awareness Programme Vaccination camp Tamil Nadu Legislative Assembly Election Volunteership

11. BEST PRACTICES

S.No	Plan	Strategy	Target	Current status
1	Padha Pooja	It will be continued in future also	Padha Pooja will be continued in future also during First year inauguration day and Teachers' Day	Currently padha pooja is in practice and it is done by the students during First year inauguration day to the parents and for the teachers it is done during teachers' day
2	Extension activities	The plan is to support the community through various components such as adult literacy, health and hygiene, awareness, women empowerment, Blood donation camp, Teaching school children celebration of	adult literacy-3 events per year health and hygiene, awareness-2 events per year women empowerment5 events per year Blood donation camp-many as possible Teaching school children-	Various programmes are being conducted through Talent quest of India(TQI), NSS team of our college and adoption of villages through Unnat Bharat Abhiyan and Got NSS best volunteer award and Best NSS officer award

		national days	frequently and periodically celebration of national days- atleast 10 per year Environment-5 per year Painting/ temple cleaning voluntary ship Vounteership in Tamil nadu election assembly etc	
3	Internship	It is made mandatory for all the students to register for internship in companies/ Industries	It is aimed to sustain the All India first rank in Internship from Internshala and AICTE NEAT Internship is equally given importance to make students to register in Industries	All the students are registered for internship and our college has got All India first rank for Best Internship record for 5 consecutive years from AICTE-Internshala, New Delhi
4	Promotion of Entrepreneurial spirit	More startups have been encouraged by conducting various awareness, orientation programme, space, facilities, resources and sharing expertise to make project into products More collaboration with Industries/higher education will be carried out to enhance the startup	At least two startup per year	EDC cell and Paavai Incubation cell under MSME is actively motivating students to establish their startup and currently, our college has an agreement signed with 23 Startup companies as an incubate.

STRATEGY IMPLEMENTATION AND MONITORING

Strategic development plan once approved by Governing Body, will be advocated to the members of the institution for implementation. Strategy when being implemented, the progress shall be measured from time to time through the IQAC.

Implementation roles at the Institutional level

TARGETS	ROLES
Good governance	Director Administration, Principal, Governing Council, Management,
Curricular aspects and Teaching- learning	Principal, Dean Academics, IQAC, Faculty development department, HODs, Faculty
Infrastructure development and learning resources	Governing Council, Chairman, Principal, Management and team
Research, Innovation and extension services	Research cell, HODs and Faculty
Faculty and Staff empowerment strategies,	Principal, HoDs, Faculty Development Department
Financial management and resource mobilization	Governing Council, Finance Committee, Principal
Alumni engagements and interactions	Alumni cell, Faculty
Placement and Training	Placement & Training team and HoDS
Departmental activities	HoDs and faculty members
Quality assurance	IQAC

CONCLUSION

The strategic plan is an effort to sketch down a pathway for the development and accomplishing the vision of the institute. The framework is designed for conveying the goals of the institute for the forthcoming years. The proper implementation of strategic and regular audits/ evaluation will be monitored and carried out through collaborative work with the team spirit to lead success and sustainability over the time. These plans may not be static and possibly be updated according to the requirements.

PAAVAI VISION

PAAVAI CULTURE

We challenge the changes
We seek beyond the best
Work shall be taken not to be given
We produce value added professionals
We lead to Prosper, Excel and Conquer

PAAVAI MANTRA

Own Our Words and Deeds