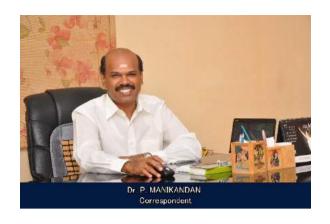


Strategy Development & Deployment



Message from the Correspondent

I welcome you to this sacred temple of learning and leadership. By the grace of God, we are now crossing new mile stones towards reaching academic excellence, Shanmuganathan Engineering College (SEC) is a rapidly growing engineering college in Pudukottai district, Tamilnadu. It is affiliated to Anna University, Chennai. It was established in 2001 by Mrs.Pichappa Valliammai, a great visionary and philanthropist, in memory of her son P.Shanmuganathan to provide the highest quality academic programmes that foster students development and content knowledge and practice.



Message from the Secretary

Shanmuganathan Engineering College is located in a sprawling campus amidst serene and calm surrounding ideally suited for pursuit of learning. The idea behind SEC is to the students free themselves from the traditional ways of thinking and instead constantly question and challenge themselves, society and the world at large. The training methodology focuses on personality development, communication, managerial and administrative skills. Facilities for training a.& placement, sports and games, career development etc. are the specialties of SEC. for more than two decades, SEC is proving the foundation of higher education in various disciplines! It is our pride and confidence to continue to work for the society and provide education to the rural students in future too.



Message from the Principal

The transition from school to college is a very big step in life. You have put in so much hard work in your public exams, spent sleepless nights, earned a rewarding score, and with the blessings of your parent/guardian you have joined your chosen stream of education to realize your life-ambition and set the foundation for your future. By choosing to create a future for yourself from our institution means that we, the teachers and management at SEC are also responsible for your successful graduation and growth. You will cherish every day at your college, right from day one, you will feel welcome by all of us here – your seniors, your new professors, and members of administration you will get to interact with. What's more the energetic environment will have you charged up to achieve your dream with confidence like never before. I assure you, you are home. Be it studies, sports or any extracurricular activities, you don't just graduate with a degree and a certificate – but become a graduate of life and a true citizen of the world of tomorrow

Preface

An Engineering institution like any other organization requires high level goals with long range plans and strategies to accomplish the Vision and Mission, which it dreams of. Strategic planning is a continuous process with a specific focus on accomplishing short, mid and long term goals in this highly competitive world. Strategic Development Plan (SDP) analyses current environment expected future scenarios and envisages the direction towards which the institution should move to achieve its set goals and objectives.

The first part of Strategic Development Plan addresses vision, mission and working on bringing out a good quality policy along with core values. These are achieved through many deliberations with all the stake holders (management, leadership, HoDs, faculty, staff, industry, students and parents). Scientific scanning of internal and external environment is done through SWOC analysis. After scanning the environment, institutional goals were set up and strategies to achieve them are arrived at for the institution.

Based on Institutional Vision & Mission, the goals are drawn by holding brainstorming sessions with HoDs and Professors. Institutional strategic goals and strategies are formed with action plans. The process of implementation is worked out and circulated to all the departments. Financial constraints and fund availability is one of important parameters of Strategic Development Plan. Internal Revenue Generation has been given due importance. Strategic Development Plan evaluation and committees to monitor the effectiveness has been clearly spelt out. The final out comes are discussed and approved by the Governing Body.

As a good practice, inputs are drawn from stake holders through active participation and collective inputs. The Strategic Development Plan will stream line the processes and progress of the institution, it will also ensure that SEC gives one of the best quality education in this rural region by 2025.

Strategic Development Process

The Chairperson, Correspondent, Secretary, Principal and the members of the Governing Body have felt the need of preparing a strategic development plan for the institution in a formal written document format. The mandate was given to the Principal to develop strategic plan 2015-2025 for the institution. The management team met a number of times, deliberated in detail and arrived at vision, mission, quality policy and core values for SEC. Environment scanning was done keeping vision in mind. The team also discussed about Institutes strategic plan to be achieved by 2025.

Institution strategic goals formed the main theme for arriving at strategies, sub strategies and road to accomplish them. Each Strategy was deliberated and sub-strategies were arrived towards implementation plan. Implementation plan worked out all details such as budget, resources needed and leaders responsible to implement with in time lines. This implementation is separately maintained by the head of the institution.

Departments play a vital role for the institution goals and academics. Hence, each department worked out on its vision, mission and short, mid & long term goals. The implementation plan for the departments also reflected all details such as budget, resources needed as well as leader responsible with time lines. HoDs form the core team for implementing departmental goals under the guidance of Principal.

Strategic Development Plan emphasizes on evaluation measures, monitoring team along with deviation steps if any over a period of time. The evaluative components for each stake holder are clearly spelt out along with periodicity of performance evaluation reviews.

The final draft document was discussed with BOG and after its detailed review; the suggestions were incorporated towards its effective implementation. This comprehensive plan forms the guiding plan for the years 2015-2025.

Vision of the Institution

To evolve as a Centre of Academic and Research Excellence by providing quality education through modern and best infrastructure facilities and to serve the Rural People, the Nation and the World through our Professional Graduates energized to become Leaders, Innovators, Entrepreneurs and Interpreters in their Profession.

Mission of the Institution

It would be the unceasing endeavour of everyone in the institution to prepare the students to face stiff competition and coping with the continuous rapid strides in technology with courage and confidence by providing them every opportunity to attain a high degree of professional competence through sustained rigorous training. Such students should prove to be an asset not only to their families but to the country itself as crusaders of its future progress and prosperity Quality Policy

Quality Policy

- > Create a record of being continuously on the top rung of Discipline, Quality Education, and Placement.
- > Create an eco-friendly atmosphere and protect the environment.
- Maintain equality, liberty and fraternity in the functioning of the institution.
- ➤ Honour our commitment to the society by all means.
- > Fulfill the aspirations of all the stakeholders.
- > The benchmark will be set higher and higher every year and reached through effective quality management system.

The Institute Strives

- To establish a system of quality assurance to continuously address, monitor and evaluate the quality of education offered to.
- To prompt an effective teaching learning process for students benefit and to transform our institution into a center for excellence in Engineering & technological studies.
- To emerge as a center of excellence for education and training for under graduate and post graduate students in different disciplines of engineering and technology without any discrimination on the basis of gender, religion caste, creed, region.

- To provide training and education to the students and equip them to play a leading role in serving mankind at national and at global levels to the best of their capabilities.
- To create a congenial atmosphere for teaching, training and learning with a view to develop technically sound, ethically strong and normally evaluated human resources.
- To establish linkages with the industrial world and other academic institutions for mutual growth and development

Profile of SEC

Education is all about creating an environment of academic freedom, where bright minds meet, discover and learn.

Shanmuganathan Engineering College is the one of the developed Engineering colleges in Pudukottai district, popularly known as SEC. It was established in 2001 by Mrs. Pichappa Valliammai, a great visionary and a philanthropist, in memory of her son P.Shanmuganathan, to provide the highest quality academic programmes that foster students' development and connect knowledge and practice. The college is located at Arasampatti near Thirumayam on the National Highway 217, at a distance of 17 km from Pudukkottai and 25 km from Karaikudi. The college is located in a sprawling campus amidst serene and calm surrounding ideally suited for the pursuit of learning.

Presently the college offers B.E. courses in CE, CSE, ECE, EEE, ME with an intake of 180. College offers M.E. Courses in CSE & Structural Engineering. SEC has been consistent to maintain excellence in the academic standards since its inception. Discipline is hallmark of SEC. Learning is an enjoyable experience here, with experienced faculty, inspiring libraries and large playgrounds and state-of-the-art labs. The management has constructed magnificent buildings on the campus surrounded by serene and natural surrounding with plenty of greenery. All the laboratories are established with sophisticated and modern equipment. The facilities are provided in the institution to meet the Academic requirements of Staff & Students. Student's Welfare, Academic Growth, their Placements and overall Personality Development is the Motto. Round the Clock Security, ATM, Departmental Stores and Canteen are some of the facilities available in the Campus.

Bachelor Programs in Engineering (B.E.)

- 1) Civil Engineering
- 2) Computer Science and Engineering
- 3) Electrical and Electronics Engineering
- 4) Electronics and Communication Engineering
- 5) Mechanical Engineering

Post-Graduate Programs (M.E)

- 1) CSE
- 2) Structural Engineering

Strength, Weakness, Opportunity and Challenges (SWOC)

Institutional Strengths

- Dedicated and proactive management with good academic background □ Well maintained infrastructure and laboratory facilities.
- Eco-friendly and conducive working atmosphere.
- 78 dynamic and well qualified post graduated faculty members, 09 faculty members have completed Ph.Ds.
- Constant encouragement given to the faculty members to pursue higher studies, research and Ph.Ds.
- Fully Wi-Fi enabled campus.
- IQAC cell to enhance the quality culture and initiatives towards the satisfaction of the stakeholders.
- Produced considerable number of university rank holders every academic year
- Fully equipped spacious Library with more than 38,000 books and provision for Wi-Fi connectivity and internet access.
- Faculty members and students are members of professional bodies like ISTE, CSI chapter etc.
- Regularly organizes National Conferences, Technical Symposiums, Workshops, Seminars and Departmental association activities etc.
- Merit based educational scholarship /tuition fee concession to financially weak and meritorious students.
- Mentor system for counselling the students and to enable the smooth implementation of continuous evaluation of academic process.
- Training and placement cell is dedicated to place students in reputed companies.
- Sports ground with athletic track and facilities for various indoor and outdoor games.

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Institutional Weakness

- Being an affiliated institution to the Anna University, have limited academic syllabus and curriculum.
- Institution is located in the rural area.
- Expectations of stake holders are very high
- Institution need to apply and get Research centers.

Institutional Opportunities

- Use of available young, dynamic and potential Faculty members to excel in the academics, R&D.
- The Institute is located near BHEL, Thirumayam, which is a hub for Mechanical and Electrical Engineering. Hence, more Industry-Institute-Interactions can be achieved rigorously.
- The Institute has good human resource to undertake industrial research and collaborative programs.
- To facilitate more students to become entrepreneurs.
- The COVID-19 pandemic has given an opportunity to re-invent modes and methods of teaching.
- To get an autonomous status after the accreditation of NAAC & NBA
- Applying for research grants from government and non-government funding agencies.

Institutional Challenges

- Norms and Regulations by Regulatory Authorities
- Retention of Senior Faculties and Ph.D. holders
- Fulfill the changing scenario in the education sector
- To train each staff in their domain to excel themselves in future ☐ Educating the rural students with poor communication skills.
- Coping with rapid changes in technology to improve the employability of the students.
- Training students with rural background in social and professional etiquette, communication, technical and other skills for employability.
- Difficult to catch the attention of professionals with good academic profiles from industry in view of institute's geographical location.
- Institution being located in a rural area achieving admissions to the level of sanctioned intake.

Strategic Plan & Deployment

Teaching learning	Academic planning and preparation of
process	AcademicCalendar
	Development of teaching plan as per OBE
	Preparation of Lesson Plan based on
	CO & POmapping
	Use of more teaching aids and adopt more ICT
	Development of e- learning resources
	Promote research culture & facilities
	Provide mentoring and personal support
	Follow a transparent and fair feedback system
	Conduct training based on need analysis
	Evaluation parameters and benchmarking
	Continuous assessment to measure outcomes
	Performance development through credit system
	Implementation of best practices
Leadership and	To follow reporting structure
participative	Decentralize the academic,
management	administration and student related
	authorities & responsibilities
	 Prescribe duties, responsibilities and
	accountability
	Portfolio assignments
	Establishment of functional committees
Internal Quality	Establishment of IQAC done
Assurance System	Framing of Quality Policy & publishing
	regularly
	Formation of Quality Monitoring
	Committee &functioning
	Educating & Training of all employees
	Periodic check & guidance for quality
	improvement

	 Establishment of audit team and process
	 Audit for remedial measures
	 Promoting best practices
	 Annual report preparation & submission
Good governance	Vision, Mission development & their articulation
	in every key position
	• Evaluation of Institute's performance and
	benchmarking
	 Institutional strategic goals setting
	• Institutional Strategic development plan
	• Monitoring and Implementing the Quality
	ManagementSystems
	 Following organization structure
	• Establishing E governance
	 Leadership development through
	decentralization
	• Establishing internal audit committee
	 Code of conduct and policy formulation,
	approval andimplementation
	• Establishing fair and transparent performance
	appraisal
	system
Student's developmentand	Budget allocation for student development
participation	programmes and activities
	• Students Trainings & Placement Activities
	• Student's representation in various committee
	and cell
	 Participation in competitions
	 Organizing competitions
	 Rewards & recognitions of achievers
	 Participation in extracurricular activities
	• Participating in social and welfare activities

Staff development &	Recruitment Policy formation & implementation
welfare	Staff performance evaluation system
	Staff Training for quality improvement
	Best possible work facilities & infrastructure
	facilities
	Code of conduct, service rules & leave rules
	Staff welfare policy implementation
	Career advancement schemes
	Rewards, recognitions and incentives
	Deputation for seminars, conferences and
	workshops etc.
	Sponsorship/ Motivation for
	qualificationimprovement
	Support for research, consultancy, innovations
Institute – Industry	Formation of industry institute interaction
Interaction	MoUs with industries
	Support for internships, visits, trainings,
	guestlectures
	Identifications of industry needs and advice on
	Curriculum for extra courses apart from
	curriculum.
	Providing opportunities for
	Industrybased/sponsored
	projects
	Providing career guidance
	Strengthen training & placement
Research and	Dedicated R &D facilitation center
innovation	Establish and develop Laboratories with
	moreresearch facility
	Fund generation through Project proposals
	Apply for Government/Non-Government
	industry,sponsored funds

	Collaborations with Government & Private
	Institutes, Universities and Research
	Organizations
Internal revenue	Establishing infrastructure for revenue
generation	generation
generation	Identification and Strengthening of IRG
	activities
	Policy for Incentives for Revenue generation
	plans
	Successful implementation of Internal
	revenuegeneration plans
Alumni Interaction	Formation of Alumni association,
	participation andregistration
	Data base creation, Regular interactions with
	alumni
	and networking
	Recognition of successful alumni
	Leverage for guest
	lecturers/internships/placements/traini
	ng/
	Exploring Contributions
	Sponsorships/scholarships/fund generation
Community Services	Identify community and social development
and Outreach	work
Activities	 Identify challenges of society for development
	work
	Provide vocational training /job oriented
	training asper local needs at the institute
	 Educational support to village people
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Physical	Infrastructure building development &
infrastructure	modification

•	Smart Class rooms, Tutorials, Seminar halls
•	Modernization of Laboratory & equipment
•	More ICT enabled classrooms

- Library up gradation
- System up gradation
- Functional facilities for e-learning
- Safety & Security management
- Water facility
- Medical facility
- Developing sports (indoor/outdoor) facilities
- Plantations
- Rain water harvesting
- Renewable Energy usage
- Hygiene, zero plastic & green campus
- Recycling of water

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. The Principal along with committees and other team member will be the custodian for strategic plan and its deployment.

Implementation at Institute Level

Governance &	Chairperson & Members of GB,
Administration	AdministrationOffice
Branding /Expansion	GB members, Management team, PRO
Students Admissions	Principal, HoDs, Admission team
Statutory Compliance	Principal, HoDs, Coordinators
Infrastructure (physical)	GB, Management, Principal, Estate Manager
Infrastructure (Academics)	Principal, HoDs

Teaching- Learning	Principal, HoDs, Faculty and Staff
Research & Development	Principal, HoDs
Students Development	Principal, HoDs
Departmental Activities	HoDs and Faculty
Training &Placement	Principal, TPO & HoDs
Quality Assurance	IQAC team

Measurable during Implementation

Effective teaching	✓ No. of teaching aids
learning process	✓ Syllabus completion
	✓ Mini projects, Major projects, Seminars
	✓ 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
Leadership and	✓ Reporting structure in place
participative	✓ Decentralization in various domains -
management	academic, administration, staff welfare,
	student development, infrastructure
	management – appointments
	✓ code of conduct - duties, responsibilities and
	accountability
	✓ Functional of statutory committees – no. of
	meetings/ semester, minutes of meetings,
	✓ planning & implementation
Internal Quality	✓ Number of IQAS initiatives/ semester
Assurance System	✓ Audits Reports
	✓ AQAR submission

Good governance	✓ GB selection
Good governance	
	✓ No. of GB meetings
	✓ Vision Mission , Dissemination & Review
	✓ Organization structure in place
	✓ Degree of decentralization
	✓ Degree of E governance
	✓ Resource mobilization
	✓ Staff appraisal & career advancement
	scheme in place
	✓ Service rules & benefits
Student's development	✓ Number of student participation
and participation	✓ Number of sports, technical, cultural events
	organized
	✓ Regional & National competitions
	participated
	✓ Regional & National recognitions
	received
	✓ Sports infrastructure provided
	✓ Funding for sports
Staff development &	✓ Number of Staff attending training programs
welfare	✓ Staff training programs organized
	✓ Sponsorships for higher education
	✓ Number of staff welfare programs
	✓ Staff awards/ recognitions/ incentives
Financial management	✓ Annual Budget forecasting income &
	expenditure
	✓ Utilization / Allocation of funds
	✓ Internal & External Audit
Institute – Industry	✓ No. of active MOUs
Interaction	✓ No. of Initiatives/activities through
	MOUs

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Students	✓ Number of career guidance trainings
Development	✓ Number of skill development
	programmes
	✓ Number of vocational trainings
	✓ Number of placement drives
	organized
	✓ Number of placement drives
	participated
	✓ Number of placements
Entrepreneurship	✓ No. of entrepreneurship trainings
	organized/participated
	✓ No. of graduates becoming
	entrepreneurs
	✓ No. of incubation center
Internal revenue	✓ Industry Sponsorships
generation	✓ Funding raised through sponsored Projects
	✓ Consultancy /Testing Services,
	✓ Alumni Contribution
	✓ Philanthropy- Donations
Alumni Interaction	✓ Alumni data base
	✓ Number of interactions
	✓ Support for internships/placements/ projects/
	consultancy
	✓ Contribution towards students development
Community Services and	✓ Number of trainings/ awareness camps
Extension Activities	provided
	✓ Number of social projects undertaken
	✓ Number of Skill development programs for
	weaker sections
	✓ Number of social welfare or outreach
	programmes done
	✓ Number of people benefited in each
	program

Infrastructure - physical	✓ Number of buildings, class rooms added
	✓ Removal of obstacles
	✓ New Laboratories added
	✓ New equipment added
	✓ Annual budget allocated & utilized
	✓ Harvesting & Recycling of water
	✓ Renewable energy source development
	✓ Green initiatives
	✓ Number. of Volumes & Titles in library
Infrastructure -	✓ Number of National& International journals
Academic	lectures etc)
	✓ Digital Library
	✓ Smart Classroom
	✓ ICT enabled classrooms

Monitoring of strategic plan

The implementation of strategic plan will be monitored time to time by Principal, Academic Council and other committees through periodic review. The section heads will prepare the detailed progress report and present it in the review meetings. The benchmarking of quality standards and its monitoring, evaluation of attainment will be carried out by the IQAC independently. The IQAC will report the findings to the committees and GB. With thorough analysis of outcomes and based on IQAC report, the above will recommend the corrective actions, need of further processes and deployment of resources. All these reports will be forwarded for further discussions and implementation to the Principal & GB.

PRINCIPAL

SHANMUGANATHAN ENGINEERING COLLEGE

ARASAMPATTI, PIDUKKOTTAI DT.