VISION 2018



SRI VENKATESWARA COLLEGE OF ENGINEERING PENNALUR, SRIPERUMBUDUR TALUK – 602 117.

Vision - Mission Document (2013 – 2018)

Message

We are happy to note that the College is releasing the "Vision 2018", the Vision – Mission document encompassing the 5 year plan from 2013 – 2018.

While the Vision – Mission remains the same, to make SVCE, a leader in higher technical education, the Vision 2018 document attempts to have a relook at the strategic plan to be adopted for the next 5 years to accomplish the same through the outcome of a SWOC analysis.

We appreciate the contribution by all concerned to the SWOC analysis and the efforts taken to propose the strategic plan and assure that the Management will lend its full support in the implementation of the Vision 2018.

- Management

Preface

For any organization, strategic planning is very much essential to accomplish the Vision through a well-planned Mission to accomplish the institutional goals in this highly competitive world. The Vision – Mission document is based on SWOC analysis, which identifies the current requirements and envisages the direction in which the organization should move to achieve its set goals and objectives.

The first part of this document defines the vision, mission which the Management wishes to pursue along with core values to be practiced. This is followed by the presentation of the SWOC analysis. After analyzing the internal and external environment, the achievable goals were set up in all possible domains through discussions in Staff Council, Executive Committee and in the Governing Council. The action plans are decided based on these goals.

While formulating the strategic plan and deployment document, care has been taken to involve the stakeholders to build a spirit of ownership which is vital for success of any organization. The Vision – Mission is also published in the web for dissemination at all levels.

The document is expected to put the thoughts into actions to ensure that SVCE will retain its name as one of most preferred technical education institutions in the state of Tamil Nadu by 2018.

VISION

To be a leader in higher technical education and research by providing the state of the art facilities to transform the learners into global contributors and achievers.

MISSION

To develop SVCE as a "Center of Excellence" offering engineering education to men and women at undergraduate and post-graduate degree levels, bringing out their total personality, emphasizing ethical values and preparing them to meet the growing challenges of the industry and diverse societal needs of our nation.

CORE VALUES

The following core values are the virtues that the Management wishes to be practiced at all levels in the institution so as to reaffirm its commitment to the purpose of education and to derive its merits such as moral, ethics, knowledge and wisdom.

Professionalism: Students at SVCE are not only taught quality engineering education, but also groomed as a Professionals through various activities carried out by Student Council and various Club activities, which involves hosting events, through which students are trained in leadership, coordination, team work, interaction with various outside agency. Students are also involved in planning and decision making through various forums.

Empowerment: SVCE believes in empowerment at all levels. Accountability and responsibility are clearly defined through laid down procedures. Timely decision making is possible at SVCE through dissemination of power.

Transparency: At SVCE, all the activities are carried out as per laid down procedures, dissemination of power at all levels, accountability and responsibility are clearly defined and meetings with the Management at regular intervals makes the system more transparent.

Quality: Consistent efforts from top Management, faculty members, staff and alumni are always in the direction of quality. Quality is the continuous process to minimize lacuna within the organization. The institute never compromises on quality. We believe in giving our best in every domain we endeavour to do at institute. SVCE is confident, competent, focused and passionate about the work that leads to achievement of excellence.

SWOC ANALYSIS

Strengths

- Transparent Governance and administration.
- Well-Qualified and experienced faculty members with broad areas of expertise.
- Faculty members collaborate with other faculty members in other Premier Institutions.
- Good quality students.
- Good infrastructure with modern laboratories etc.
- Scholarship for Meritorious students.
- Consistent and good placement record.
- Recognition by many Universities abroad for higher studies.
- Industrial training for Teaching and Supporting Staff in the relevant field.
- Faculty with rich industry experience.
- Interdisciplinary interaction among departments.
- Encouraging students to take up entrepreneurship.
- Communication and Soft Skill training program for students to prepare them for placements / workplace.

- MoU with industries to help students for internship, training and placement.
- Many departments recognized as Research centers.
- Motivating faculty to receive funded projects from government agencies.
- Financial Assistance to Faculty to attend conferences abroad.
- Encouragement and Support organize Workshops / Conferences.
- Good laboratory facilities and research environment leading to consultancy and research projects.
- Conducive learning ambience (ICT enabled class rooms), transparent & impartial system and appreciable academic freedom.
- Training at Cochin Shipyard for Marine Engineering Students.
- Vantage location amidst the industrial belt adjacent to Chennai city which gives a lot of exposure to diverse culture and industrial contacts.

Weaknesses

- Inadequate Quarters / Residential facility for pursuing research after college working hours.
- Limited Hostel accommodation.
- No ground water in campus.
- Inadequate technology transfers.
- Limited library space.
- Lack of availability of electronic data.
- Unavailability of child-care center for working women.
- Limited International collaboration.
- Non-availability of exclusive research facility.
- Less MoU's with educational institutions in abroad.
- IPRs granted is a few.
- Lack of publicity measures.

Opportunities

- Reputation and Goodwill in the society.
- Infrastructure availability for starting advanced Post Graduate programs.
- Enhance research activities through sponsored R & D projects.
- Alumni Networking for Academic and placement activities.
- Internship opportunities.
- Adoption of new technologies such as bio-fuels & Nanotechnology as thrust areas.
- Creating Centers of Excellence.
- Tie-up with MSMEs in the industrial belt around the college.
- Technical training to industrial personnel by faculty members.
- Special entrepreneurship training to students with business background and startup idea.
- Development of IT based apps for different applications.
- Start-up India and Make-in India.
- Contribution to the methods and materials used for language learning.
- Good Alumni network.

Challenges

- Fewer tie-ups with industries.
- Declining PG Admission.
- Stiff competition in core placement.
- Lack of interest shown by MSMEs to collaborate.
- Declining interest in the society to pursue Engineering programs.
- Growing number of engineering institutions.
- Government policies towards funding for research projects.
- Industrial preference of science Graduates rather than engineering Graduates.
- Proliferation of electronic gadgets leading to diversion among learners.
- Crunch in Funding provided by industries.
- Increasing student behavioral issues and attitude towards learning.
- Imparting employability skills due to fast changing technology.

- Rapidly modified Government policies unsuitable for quick adaptation.
- Many students choosing courses out of peer pressure and lack of alternatives with little interest.
- Students from different backgrounds.
- Government policy on abolishing entrance examinations.
- Ever changing industrial expectations.
- Different methodologies adopted by government agencies for ranking and accreditation of institutions.
- Impact due to revised CIP* guidelines.
- Requirement by industries for multi-skilled professionals with managerial capabilities.
- Recruitment routed through RPSLs for Marine Engineering.
- Ups and Downs in the IT sector.

STRATEGIC PLAN OF ACTION

Based on the SWOC analysis the following needs are identified and they will be considered for implementation during the next five years.

- Setting up of an Entrepreneurship Promotion and Incubation Center to promote entrepreneurship and offer incubation facilities for nurturing innovative ideas.
- Constructing more hostel blocks to meet the growing demand for hostel by students who opt to join the institution from far and wide.
- Constructing more number of staff quarters to improve research activities through residential staff.
- Setting up of rain water collection pond to alleviate the problems due to non-availability of ground water and dependency on third party vendors for water supply.
- Building of new Library to address limited library space due to growing number of book storage and for keeping the structure within the safe load limits.

- To become Autonomous to enable modification of curriculum and syllabus to suit the growing needs of the industry and to improve the standard of education which is constrained by being one among hundreds of non-autonomous institutions affiliated to the University.
- Centers of Excellence in allied departments to enable research and consultancy work in thrust areas of future like Nanotechnology, cloud technology and artificial intelligence. This will be implemented in a phased manner.
- Creating a centralized database to bring in all operations under one umbrella for a more professional and integrated approach of various activities, which is likely to improve the productivity. This will be implemented by subscribing to a reputed ERP package.
- Creating a dedicated Placement cum Training Center to cater to the growing needs of the training and placement of the students, which plays a major role in defining the standard of the institution. It will also aid in improving the Industry-Institute Interaction through training for staff / students.

IMPLEMENTATION AND LEVEL OF ACHIEVEMENT AS ON DECEMBER 2018

Strategic Plan of the institution was submitted to the SVCE Management for approval and implementation. After careful consideration the SVCE Management approved the implementation of the following strategic plans. Based on the approval from the Management, applications were submitted to various Government Agencies for implementing the above plans.

• Setting up of an Entrepreneurship Promotion and Incubation Center

MSME, Government of India recognized our institute as Business Incubator for Implementing the scheme "Support for Entrepreneurial and Managerial Development of SMEs through Incubator" vide Letter No:3(6)2015/Inc./16th Meeting Dt:31.08.2015. Based on the recognition by MSME, Gol, Entrepreneurship Promotion and Incubation Center (SVCE-EPIC) was inaugurated in our college campus on 2nd August.2016. SVCE Management earmarked 2500 sq. ft area for establishing Business Incubator.

Specs: Maximum of 10 incubatees could be accommodated under

MSME Scheme. Maximum of 20 Pre-incubation space available

Area: 2500 Sq. feet area; Each cabin size: 11 Feet X 10 Feet

Cost: Infrastructure Development cost: Rs.12.00 Lakhs

Facilities:

- 1. Five cabins (2 seaters) are available with furniture, Wi-Fi & LAN networking.
- 2. Working space with table and basic tools
- 3. Office with Desktop, laptop, printer, projector
- 4. Mini library which contains Text Books, reports, training manuals, etc.





Setting up of rain water collection pond

SVCE had constructed rainwater harvesting system to an area of about 2600 sq.m in order to enhance the ground water quality and quantity in and around the campus. To convey rainwater in the campus, storm water rains have been constructed all around the campus, especially from roof tops, which is 2400 sq.m. The total area of rainwater harvesting system is about 2600 sq.m and can hold about 40 lakh litres of water. To facilitate percolation of water to underground, rain water harvesting pond depth has been designed for 1.5 meters with a storage capacity of 10 million litres.

Area: 2500 Sqm.

Cost: Rs.2.29 Crores

Facilities

i) Storm water drainage

ii) Terrace water link to storm water drain





Building of new Library to address limited library space

A spacious four storey (Ground + 3 Floors) new library building was constructed with a total area of 4900.75 Sq. Mt. (52732.07 Sq. Ft.). The size of new library building is more than 3 times of old library building which was 1338 Sq. Mt. (14402.11 Sq. Ft.). The new 'Dr. A.C. Muthiah Central Library', was inaugurated by Dr. A.C. Muthiah, Chairman of Governing Council, Sri Venkateswara College of Engineering on 2nd November 2016.

Specification:

Total area - 4900.75 sq.mt. (52732.07 Sq.Ft.).

Cost - Rs.15.25 Crores

Floor-wise Area:

Ground Floor
 First Floor
 Second Floor
 Third Floor
 1,531 Sq.Mt. or 16,473.67 Sq.Ft.
 1,148.88 Sq.Mt. or 12,362 Sq.Ft.
 1,148.47 Sq.Mt. or 12,745 Sq.Ft.
 1,036.41 Sq.Mt. or 11,152 Sq.Ft.

Floor-wise Facilities:

Ground Floor

Cloakroom, Catalogue Search (OPAC) & Self Renewal, Journals Section - Printed & Online Journals of reputed Publishers - IEEE, Springer, Science Direct, Nature, ASCE, ACM, etc., Reference Section, Books for Competitive Examinations, A/C Reading Halls with Wi-Fi facility for Students and Staff, Circulation Counter, Reprographic Section, Conference Hall (with Video Conferencing Facilities), Seminar Hall (with Video Conferencing Facilities) and Cafeteria.

First Floor

Library Office, Record Room, Binding Section, Two Book Stacks, Back Volume Section and A/C Reading Halls for Students and Staff.

Second Floor:

Digital Library - NPTEL & SVCE Faculty Video Lectures, Server Room, Book Bank, Two Book Stacks and A/C Reading Halls for Students and Staff.

Third Floor:

Proposed to have a permanent exhibition on Science and Technology which will have innovations, working models, projects, etc. of all engineering discipline.

Other facilities available in Dr. A.C. Muthiah Central Library are LIFT, Fire Alarm & CCTV Surveillance, computer facilities to search Library Books, eBooks, eJournals, Internet, etc. and Restrooms in all floors.









• To become Autonomous

The University Grants Commission (UGC) vide letter No.22-1/2016 (AC) dt. 27th May 2016 had conferred fresh autonomous status to our institution for a period of six years with effect from 2016-17. SVCE Management earmarked 435 Sq.m space for the office of CoE. A strong room was built. Necessary Infrastructure has been provided. Various committees as per stipulated norms were constituted.

Floor-wise Area:

➤ Ground Floor : 435 Sq.m (Excluding Workshop & Machine Shop Area)

First Floor : 435 Sq.m (5 Rooms)Second Floor : 430.6 Sq.m (4 Rooms)

Facilities:

Computers

Printers (B&W and Colour)

OMR Scanner

Bar Code Printer

- Laptop
- Paper Shredders

> UPS









Centers of Excellence in allied departments

In July 2016, an "Interdisciplinary Centre for Nanotechnology" was set-up through joint efforts from Departments of EEE and Biotechnology. In January 2017, construction of 500 sq.ft of Class 10,000 type Cleanroom facility was completed. Intramural seed funding amounting to Rs.7.00 lakhs per year has been sanctioned for 3 years. The thrust area includes Micro and Nano electronics, Biotechnology, Optoelectronics, Solar cells and Nano materials.

Specifications:

Shared facility for Nano Research with the following thrust areas.

- 1. Thin film technology and Microelectronics
- 2. Nanobiotechnology and Tissue Engineering
- 3. Nanocomposites
- 4. Computational Engineering

Area: 500 Sq.Ft (To be expanded to 1000 Sq.Ft in future).

Cost:

Rs.17.00 Lakhs: Existing Equipment.

Rs.90.60 Lakhs: Purchase pending from DST-FIST and DST-SERB grants.

Facilities:

Available:

DC Sputtering Unit, RF Power Supply, Wet bench- Fume hood, Gases, Regulators, Water Chiller, Annealing Chamber and Accessories, Ultrasonicator, Magnetic Stirrer, Mass Flow Controller, Cleanroom facility

Proposed:

Mask Aligner for Lithography, Dynamic Light Scattering (DLS), Electrical Characterization Setup, Simulation and Modeling Software, High Energy Ball Mill, 3D Printer





Annealing Furnace



RF Sputtering Chiller



Ultrasonicator



Wet Bench

Conclusion

Towards the end of the five year period from 2013-2018, the institution has been able to identify the crucial needs and implement various important aspects as a part of the strategic plan with a view to march towards the vison of the institution. While it is understood that there are many other aspects that need to be covered, they will be

taken up as a part of the strategic plan during the next five year period in addition to the new requirements that may be identified as crucial requirements at that point of time.









