



V.S.B. ENGINEERING COLLEGE

KARUR – 639111 Tamil Nadu

CRITERION 6

STRATEGIC PLAN (2017-2022)

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1. PREAMBLE

Knowledge is recognized as the main feature for economic growth and development of global economy, coupled with information and communication revolution. Technical education plays a vital role by creating skillful engineers, enhancing industry productivity and improving the quality of social life. Technology impact created novel methods for classroom teaching and learning process. Many intellectual, social and practical problems require Inter-disciplinary approaches. It is necessary to empower the teachers to stay abreast of current and future trends in both the academic and research frontiers. Curriculum orientation synergizing between academics and research, reengineers the student strengths to think out of the box and exploring the new horizons.

V.S.B Engineering College, Karur is a unique institution that from its inception has charted distinct pathways to academic excellence.

It has become and remains one of the most distinguished and preeminent institutions of higher education in the State. Its complexity, diversity, and comprehensiveness are a fountain head of creativity and innovation. V.S.B Engineering College, Karur, as a modern world class academic institute, has a strong inclination towards sustainable development through research and expansion of innovative technologies. In an era of global progression propelled by technology, research at academic institutes will foster economic growth and helps in attaining self-reliance in technology and innovation.

Engineering College, Karur is committed to fundamental long term research and innovation in leading edge technologies, performs a diverse and expanded set of activities like,

- Continuous improvement of knowledge repository and domain expertise.
- Becoming a source for innovation, addressing societal needs and developing new products leading to revenue generation.
- Encouraging new ideas and proposals through research awards and remuneration.
- Exploring new horizons through fundamental research.
- Producing high quality engineers with the required skills and knowledge at different levels (undergraduate, postgraduate).

Institutions with state of art research and academics contribute to national prosperity and security. The strategic plan of V.S.B Engineering College, Karur is prepared in this context providing a sense of direction and outlining measurable goals. The Strategy Document emphasizes on accomplishing the objectives and bringing out a good quality policy along with core values.

2. PHILOSOPHY

The Philosophy of V.S.B. Educational Trust is "Hard work is the key to Success." which leads both individually and collectively, to one see deepest capacity to sense and shape the future.

3. VISION

We endeavour to impart futuristic technical education of the highest quality to the student community and to inculcate discipline in them to face the world with self-confidence and thus we prepare them for life as responsible citizens to uphold human values and to be of service at large. We strive to bring up the Institution as an Institution of Academic excellence of International standard.

4. MISSION

We transform persons into personalities by the state-of-the-art infrastructure, time consciousness, quick response and the best academic practices through assessment and advice.

5. QUALITY POLICY

V.S.B.Engineering College strives to achieve academic excellence by futuristic outlook in the fields of Engineering and Technology in a well-disciplined environment through

- Commitment to continual improvement in all areas
- Involvement of people at all levels
- Upgradation of infrastructure and human resources

6. CORE VALUES

Integrity

Adopt truthfulness and transparency in academic and administrative activities for holistic development.

Accountability

Establish and communicate the clearly defined, articulated goals and objectives.

Excellence

Exhibit Quality in staffing, facilities and services.

Community Development

Offer training to the students" community for employability skill development in collaboration with industries.

ECO-Friendly Campus

Support eco-friendly environment through a splendid lush green campus.

7. OBJECTIVES

7.1 OBJECTIVE

Achieving Academic excellence by fostering experiential learning through ICT. 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.

VSBEC provides an environment that encourages and celebrates academic excellence, individual initiative and responsibility as students make progress toward their educational goals. It outlines the commitment to academic performance expected of all students and the consequences for unacceptable academic performance.

The major goal of this function has been decouple "Excellence" - achieved through the disciplined pursuit of effective educational practices from "Prestige" which is to provide high quality education to students to become successful professionals in their respective fields by nurturing the careers of excellence and leadership in Science & Technology.

Strategies

1. Structured Induction procedure

Excellence in Engineering Education from students' perspective is that students learn in the class rooms and on their own by listening, visualizing, experimenting, experiencing, and going through practical training. The philosophy of education is to work with "END IN MIND". Hence the teaching learning process of VSBEC is structured as "Career Vision Approach" - a student visualizing the career opportunities and the approach for successful transition towards the set goals. Inspirational talks by motivational speakers (successful

entrepreneurs) and lecture series on career opportunities are scheduled during the fresher sday.

2. Outcome Based Education (OBE)

OBE is focused around the students for successful learning outcomes at the end of the program. Theoutcomes are the abilities to be developed and the performance of the students in terms of learningcompetence in using the content, information, ideas and tools. Each department has developed the PEOs, PSOs and POs on looking at the vision and mission of the Institution/ Department. Mapping of COs and POs/ PSOs has been practiced and attainment has been calculated. The outcome based education (OBE) has been meticulously practiced.

3. 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 and a writing support 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.

Metrics / Measures

| Key Result Areas | Measures |
|--|--|
| | Effective implementation of Academic calendar. |
| T C | ICT utilization / Pedagogy Tools. |
| Learner Centric Curriculum delivery | Online Self learning Resources. |
| Curriculum denvery | Industry exposure through Internships. |
| | Workshops/FDPs on Pedagogy/Technology. |
| Smart Classrooms | Multimedia and support equipment. |
| Silian Ciassioonis | E-Learning Facilities. |
| | Un-interrupted delivery mechanism. |
| | Periodic maintenance and up gradation. |
| Laboratories | Virtual Lab Experiments. |
| 3 | Resources over and above the curriculum. |

7.2 OBJECTIVE

Exploration of Knowledge through Innovation and Research providing inclusiveness to societal needs.

In an era of increasing academic engagement that includes several disciplines under one subject, it is imperative to understand the nuances of multidisciplinary research to engage with academia. The concept of globalization and liberalization, have given rise to problems and challenges across various disciplines. Multidisciplinary research is indispensable to tackle complex problems and it can serve as a bridge between fundamental and applied research. The Institute addresses and enhances students" imagination, initiative and practical skills and equips them to innovate and confidently cross the threshold of challenges.

An exclusive research facility (Research and Development Cell) promotes multi-dimensional research in cutting-edge technologies by effective utilization of the available competencies. Problem-specific and inventive research to address regional and national needs is taken up. The Institute's determination to remain a major research institution is therefore in itself a commitment to high quality teaching & learning embedded into research by enhancing collaborative research with academic institutes, industry and R&D organizations.

Strategies

Research Labs

The objective of these labs is to initiate focused advanced research and establish strategic partnership between institute and industry. The faculty and students involvement in these labs keep them abreast of the developments in the field grooming them towards addressing the real world problems.

Industry Institute Collaboration

The Industry Institute collaboration proactively builds partnerships with industry in areas of strengths of the Institute. Collaboration with the industry is built through well-structured student internships. A significant quantum of research will originate from problems identified as a result of the faculty sengagement with industry.

Metrics / Measures

| Key Result Areas | Measures |
|------------------------|--|
| | Numbers of papers published in reputed National and international journals. |
| Research Publications | Numbers of papers presented in reputed National and international conferences. |
| | Faculty as reviewers for reputed journals. |
| | Faculty recognized as guides by external institutions. |
| Research centers | Number of Ph.D scholars guided. |
| | Membership in Professional bodies. |
| | Fund raising through Project Proposals. |
| | Student Internships. |
| Industry Collaboration | Knowledge exchange through seminars and workshops. |
| | MOUs with Premier industries. |
| Patents and Copyrights | Number of Indian Patents. |
| Patents and Copyrights | Books and Monograms, Copy rights. |

7.3 OBJECTIVE

Exponent for Development of a Rounded Personality with Global Vision & Social responsibility.

The holistic approach to education captures the creativity, interdisciplinary, complexity, and adaptability required for the profession to grow and truly serve global needs. 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, intelligences and attitudes to succeed at every aspect of their lives. Participation of students in Co-Curricular Activities and Extra Curricular Activities helps to enhance all rounded personality to strongly face the turbulent road of the future. Experiences and appreciations gained through these activities assist students during internships. It helps to hone the talents of students and gives them an opportunity to develop specialized skills. Academic performance goes up as they learn to balance the Co-Curricular Activities and Extra Curricular Activities with academic pursuits. They also better understand time management.

- ❖ Build self-confidence and enable the student to excel in their academic pursuits.
- Provide training towards Skill development and encourage participation in Internships.
- Prepare towards Inclusiveness and socially responsible.

Strategies

1. Career Guidance, Mentoring, Training and Placement

The unique initiative of the institute, Mentoring and Training plays a key role in identifying the student strengths and weaknesses and provide training to enhance their skill set in the selected domain. The structured mentoring program emphasizes on the social-emotional learning and cognitive development molding into a well-rounded, successful and competitive citizens of tomorrow.

Remedial classes are arranged to enhance academic skills of slow learners. The student induction during the year starts with familiarizing the campus and facilities available for the dreams come true.

Networking with Alumni is created to offer career guidance, role model and professional opportunities. The Career Vision approach enables them to visualize the advancements in the chosen career and the approaches to be taken up to sharpen the saw and keep themselves updated.

2. Student support and Progression

At VSBEC students are encouraged and supported in setting targets for themselves. The institute strives towards widening opportunities throughout and beyond the student lifecycle. Exposure to the cutting edge technologies and the advancements is provided through the certification courses offered on-campus. Embedding flexible learning through NPTELis facilitated in the campus. Training and skill development courses, MOUs with reputed organizations and industries engage students in internships and further leading to employment. Peer-led learning is promoted to help build students" expectations and confidence.

3. Extra-Curricular and Co-Curricular Activities

The institute integrates Co-Curricular and Extra-curricular Activities into student life to create a "rounded personality". Well-equipped physical Education department with adequate play areas and a National Service Scheme (NSS) Unit, is also available in the campus. Students are encouraged to participate in inter collegiate, state level and national level competitions.

Metrics / Measures

| Key Result Areas | Measures |
|--------------------------------|---|
| Mentoring | Exclusive Mentoring record. |
| Wichtoffing | Scheduled interactions & counseling. |
| | Dedicated training for recruitment. |
| | Interdisciplinary Exposure & training. |
| Training and Career Guidance | Certificate courses. |
| | Alumni interactions. |
| | Modernization of infrastructure. |
| MoUs | Internships planning and execution. |
| WIGOS | Industry experts as resource personal. |
| | Participation in outside world competitions. |
| | Professional societies" activities. |
| Co-curricular, Extracurricular | State-of-art infrastructure (indoor / outdoor). |
| and Extension activities | Participation in Tournaments. |
| | Blood donation and health awareness |
| | camps. |

7.4 OBJECTIVE

Relentlessly pursue institutional effectiveness through quality assurance systems.

VSBEC continuously reviews, develops and aligns its culture, people, structure, work processes and technologies, with its Vision, Mission, Objectives and Quality Policies. To support the key strategy areas of academics, research, innovation and globalization it is required to maximize the utilization and effectiveness of human and financial resources, and facilities. Continuous monitoring of the key success indicators and publishing these results to

the constituent committees, enables to review and improve the alignment of support functions, processes and resource allocation strategies across the institute.

Quality in Education can be defined as the development of intellectual skills and knowledge that will equip graduates to contribute to society through productive and satisfying engineering careers as innovators, decision makers and leaders in the Global economy.

To achieve the esteemed goal of producing well qualified and trained technocrats an institution has to work efficiently and effectively. The institution strives towards imparting technical competence to the student by creating a healthy environment for their personality development and finally enabling them to achieve higher grades in their respective fields. This is through:

- Transparency and Leadership
- · Quality assurance and Accreditations
- Outflow management and growth plans

Strategies

1. Good Governance

The participatory governance, in the institute creates a sound, ethical and sustainable environment, acceptable to the institution as a whole and the other key stake holders. It oversees the implementation of policies and procedures year-over-year by designing, developing and deploying short summaries of progress. The overlapping interests of the stake holders are addressed to support a more effective delivery of education to meet the nation needs. Scheduled interactions of the key area implementers, such as academics, research, innovation and globalization, enable to discuss the current progress and the potential measures for enhancement. Forecast & estimation of capital, revenue income and expenditures are closely monitored to meet the requirements as per the schedules.

2. Resources and Infrastructure

Critical talent identification and retention of the faculty is addressed continuously, to improve the outcomes in the learner centric environment. Opportunities for faculty professional development, collaboration, and networking are provided for upgrading the competence and reflecting in the deliverables. The frontier of science and technology are doubling by leaps

and bounds. The faculty to be constantly in touch with the same, update themselves through enhancing their qualifications, attending various quality improvement programs like workshops, seminars, conference and summer trainings.

3. Quality Assurance Systems

Being growth oriented and to have a good reputation, the quality assurance systems set in the institute, bench marking the reputed organizations provide metrics for continuous monitoring and implementation of standard procedures designed in line with the Vision and Mission. Internal audits are taken up by the quality policy steering committee, remedial measures, if any are suggested and implemented.

Metrics / Measures

| Key Result Areas | Measures |
|-------------------|---|
| Governance | Accreditations and Assessments. |
| Governance | Guiding and approving policy matters. |
| | Customize and implement best practices. |
| | Internal audit committee for regulatory compliance. |
| Quality Assurance | Systems, checks and balances - Remedial measures. |
| | Training need analysis and implementation. |
| | Continuous progress assessment. |
| | Budget formulation and approvals. |
| Budget | Planned expenditure management. |
| | Scheduled audits and checks. |
| D | Advertisements and merit based recruitments. |
| Resources | Sponsorship for paper presentation. |