Institutional Strategic Plan Vidya Academy of Science and Technology Technical Campus Kilimanoor, Thiruvananthapuram – 695602 (2018-2023)

The VAST TC Planning Model:

Institutions of higher education are driven to engage in strategic planning by a variety of critical forces, both external and internal, to their environments. The forces driving the VAST TC's 2018-2023 Strategic Plan for the Institution Vidya Academy of Science and Technology Technical Campus (VAST TC) include, but are not limited to, the demand for higher education that is fuelled by the economic progress and high unemployment; changing demographics; and the need for a workforce that will enable this region of Kerala state to maintain its competitive edge on the national stage encompassing Technology and Engineering.

The VAST TC 2018-2023 Strategic Plan is grounded in the following best practice principles:

- 1. Effective strategic planning requires identifying and implementing strategies that will move VAST TC to a better desired future as an educational institution in the state of Kerala, nationally, and globally.
- 2. Strategic planning is not a "once-and-done" event. It is a continuous process involving planning, implementing, assessing outcomes and using results and lessons learned for further planning and revision and/or modification of strategies.
- 3. Measurement and/or assessment are keys for strategic planning. Therefore, identifying key indicators for sub-goals and identifying responsible divisions/units will ensure effective monitoring and evaluation of outcomes.
- 4. The Institution should focus on a few but bold sub goals and strategies. Resources, including funds and time, are limited. Therefore, prioritizing of strategies and focusing on those that have the potential of being game changers are critical.
- 5. Since the execution of strategies is at the department or unit level too, the strategic planning process has to be participatory to ensure shared vision, as well as shared ownership and commitment to the plan by stakeholders throughout the Institution.

The strategic planning process uses methodical approach to engage in systematic and comprehensive assessment of the annual VAST TC strategic operational plan. Goals and sub-goals are carefully tracked; and reports are regularly disseminated to assist faculty, staff, and administrators in using data-driven decision making and to mapping progress, also in line with the management's VGP 2020.

VAST TC Strategic Plan 2018–2023 identifies the following targets:

- Develop, strengthen, and implement academic programs that are responsive to the VAST TC's mission and are systematically reviewed for sustained quality, relevance, and excellence to meet the challenges of a highly competitive and global workforce.
- Enhance institute infrastructure to accommodate research, production centre, entrepreneurial activities, technology development and transfer; contribute to an enhanced quality of life in the region; and facilitate sustainable domestic and national economic development and competitiveness.
- Promote and sustain a disciplined campus environment that supports a high quality of life and learning that positively impacts retention through graduation and produces knowledgeable and culturally competent citizens able to lead effectively and compete globally.
- Continuous and involved participation of faculty members and students in various technical seminars, workshops and conferences. Motivate our faculty members and students to involve in research projects and to publish journal papers.
- Improve academic interaction and participation of institutes / universities of national and international eminence in order to facilitate learning, innovation and research.

Broad Strategic Directions

Following are four strategic themes that identify broad directions for responding to the challenges in VAST TC's changing external and internal environment. These themes are manifest in several objectives and actions proposed in subsequent sections of this plan:

- · Focus
- · Adaptability
- · Coordination
- · Efficiency

To be more focused - It is necessary to make difficult choices about which academic areas or units to emphasize and which to de-emphasize; what to keep and strengthen; what to downsize or eliminate.

To be more adaptable - VAST TC's academic arrangements and structures need to be more flexible, to be evaluated and changed on a continual basis, and to have fluidity.

To introduce more coordination - The institution needs more permeable boundaries and connectivity across academic fields, disciplines, programs, and other units, so that both students and faculty can cross these boundaries or transcend them when opportunities to enhance academic excellence emerge and also to ensure that the institution uses its intellectual resources efficiently and effectively.

To be more efficient – VAST TC needs to examine administrative structures and policies carefully, with an eye toward creating a tighter fit between our methods of accomplishing tasks and the institution's goals and aspirations.

Greater focus and connectivity are essential to preserve and enhance academic excellence, whereas greater adaptability and efficiency are especially critical to the stewardship of resources. Implementation of these broad directions would need to respect and affirm the longstanding principles of collegiality and shared governance.

VAST TC's Strategic Goal I: Develop, strengthen, and implement academic programs that are responsive to the VAST TC's mission and are systematically reviewed for sustained quality, relevance, and excellence to meet the challenges of a highly competitive and global workforce.

Sub-Goal 1: Promote and support college readiness and retention to graduation.

Strategy I: Strengthen the plans for institution engagement in local schools/polytechnic colleges that focuses on career education for plus two/Diploma students with parent involvement.

Strategy II: Strengthen and implement a comprehensive institutional academic enhancement program for incoming students to improve their academic skills and success in college.

Sub-Goal 2: Promote and support institution readiness to adopt present and future technological development.

Strategy I: Acquire and install state-of-the-art equipment and technology for teaching, testing, consultancy and research.

Strategy II: Involve faculty and students in research that leads to innovation. Continue steps to establish production centre / Incubation centre.

VAST TC's Strategic Goal II: Enhance institute infrastructure to accommodate research, production centre, entrepreneurial activities, technology development and transfer; contribute to an enhanced quality of life in the region; and facilitate sustainable domestic and national economic development and competitiveness.

Sub-Goal 1: Enhance the infrastructure and facility in tune with changing technological needs.

Strategy I: Construction of second floor in East Block with all state of the art facilities.

Strategy II: Enhance the power back up for all available computer systems.

Strategy III: Enhance the internet connection bandwidth and Wi-fi to support the 4G and future communication technologies.

Sub-Goal 2: Enhance interdisciplinary research opportunities to impact the quality of life for the region.

Strategy I: Develop programs that will prepare faculty and students to address environmental problems in the region and State.

Strategy II: Seek and/or strengthen on-campus collaborative grant opportunities. Use the skills and knowledge of faculty, staff and students to work in collaboration with communities to improve the quality of life for the region through outreach activities.

Sub-Goal 3: Increase revenue opportunities for faculty and students.

Strategy I: Institute scholarship funds for both students and faculty, and support other opportunities that provide incentives and promote productivity in research and other consultancy works.

Strategy II: Establish specialty training centres that are funded through state and other agencies (e.g., ISRO, DST and skill India)

Strategy III: Establish an Entrepreneurship Centre to engage the institute and community.

VAST TC's Strategic Goal III: Promote and sustain a disciplined campus environment that supports a high quality of life and learning that positively impacts retention through graduation and produces knowledgeable and culturally competent citizens able to lead effectively and compete globally.

Sub-Goal 1: Upgrade teaching-learning process to create impact.

Strategy I: Continue implementation of course material preparation by respective teachers and evaluate them for impact and "best practices."

Strategy II: Improve technical support and training to faculty members for classroom instruction and student engagement.

Strategy III: Provide more SMART classrooms.

Strategy VI: Applying for NBA/NAAC accreditation.

Sub-Goal 3: Increase student retention to impact successful completion of graduation within the prescribed period of four years.

Strategy I: Develop an implementation plan that improves student support and advising services, enhances students' level of satisfaction, and results in higher retention and graduation rates.

Strategy II: Enhance the PTA activities to develop, implement, and assess changes to positively impact retention and increase four year graduation rates.

Strategy III: Continue scholarships for need-based students. (Academic and economic basis)

Strategy V: Identify the potential year back students and analyze the factors that lead to poor academic performance; plan appropriate programs to address the problems.

Sub-Goal 3: Improve the teaching/learning environment.

Strategy I: Maintaining faculty/student ratios to meet the NBA requirement.

Strategy II: Establish a mentoring program for new and untenured faculty.

Strategy III: Hire additional faculty in needed areas, especially general education.

Strategy IV: Promote a culture of civic engagement by implementing service learning as a component of the academic experience tied to the curriculum and university outreach efforts.

Strategy V: Provide financial support for students, faculty, and staff who present research papers pertaining to the indexed International Journals.

Strategy VI: Establishment of a career oriented centre to train the students for participation in IAS / IPS / IES / IRS / IFS/GATE courses. Equip some teachers to get trained on these programs.

Sub goal 4: Improve the quality of campus life

Strategy I: Conduction of cultural programs involving ethnic communities - celebration of major regional and national festivals.

Strategy II: Motivating students to become members of college clubs and professional societies and to actively participate.

Strategy III: Improve and augment hostel, sports and recreation facility.

Strategy IV: Improve the campus ambiance through proper illumination, beautification and maintaining greenery.

VAST TC's Strategic Goal IV: Continuous and involved participation of faculty members and students in various technical seminars, workshops and conferences. Motivate our faculty members and students to involve in research projects and to publish journal papers.

Sub-Goal 1: Provide opportunities to the faculty & staff members and students to take part in Seminars/Workshops/conferences.

Strategy I: Conduction of technical seminars, workshops and conferences in the campus.

Strategy II: Identifying potential areas and related training workshops and seminars in other institutions/universities.

Sub-Goal 2: Encourage the faculty & staff members and students to involve in research related projects.

Strategy I: Formulate the research team comprising members from all departments to send research proposals to various funding agencies and provide platform for the engagement of students in such projects.

Strategy II: Motivate the faculty members and students to publish their research outcome in journals.

VAST TC's Strategic Goal V: Improve academic interaction and participation of institutes / universities of national and international eminence in order to facilitate learning, innovation and research.

Sub-Goal 1: Enhance MOU with premier Indian Technological Institutes and foreign universities.

Strategy I: Develop an interactive cell in the Institution to interact with authorities of different Indian Technological Institutes and foreign universities for establishing MOU with them.

Strategy II: Contact other leading institutions/ universities to study and explore the possible avenues of collaboration with respect to the facilities established by them.

Sub-Goal 2: Establishing a hub of Institutional academic expertise-VAST TC out reach.

Strategy I: Creating a database of institutional academic expertise.

Strategy II: Canvassing the academic exchange programs offer possible.

Sub-Goal 4: Creating an Engineering consultancy centre, catering the technical consultancy need of other Institutes.

Strategy I: Establishing a team of skilled engineers and technical staff in various domains of Engineering consultancy.

Strategy II: Bringing creativity in the nature of services.

Strategy III: Marketing the services that can be rendered.

Review Progress – Balanced Scorecard

VAST TC's Strategic Goal I: Develop, strengthen, and implement academic programs that are responsive to the VAST TC's mission and are systematically reviewed for sustained quality, relevance, and excellence to meet the challenges of a highly competitive and global workforce.

| Sub Goal 1 | Strategy | Action plans | Time line |
|--|----------|--|---|
| Promote and support college | I | Strengthening Career Guidance Program (CGP) for plus two and poly students. | Regular Basis during Admission time |
| readiness and retention to graduation | п | Strengthening Bridge Course for first year students and Induction Program as prescribed by KTU | Regular Basis during start of the first year. |
| Sub Goal 2 | Strategy | Action plans | Time line |
| Promote and support institution readiness to adopt | I | Budget allocation. Identifying task force to recognize the needs and to prioritize the procurement | 2020 2020-21 |
| present and future technological development. | II | Identifying groups and arranging meetings with industries to explore collaboration. | 2018-19 |

VAST TC's Strategic Goal II: Enhance institute infrastructure to accommodate research, production centre, entrepreneurial activities, technology development and transfer; contribute to an enhanced quality of life in the region; and facilitate sustainable domestic and national economic development and competitiveness.

| Sub Goal 1 | Strategy | Action plans | Time line |
|--------------------------------|----------|--|-----------|
| Enhance the infrastructure and | I | Construction of second floor in East Block | 2019-20 |
| facility in tune with changing | II | Enhancing the power back up (UPS) | 2018-19 |
| technological needs. | III | Enhancing BW by 50 MBPS | 2020-21 |

| Sub Goal 2 | Strategy | Action plans | Time line |
|--|----------|---|--|
| Enhance interdisciplinary research opportunities to impact the quality of life for the region. | I | Arranging sustainable design and development programmes with resource persons from CSIR/ISRO. | 2018-19 |
| | п | Arranging different community meet in the campus and at site. | 2019-20 |
| Sub Goal 3 | Strategy | Action plans | Time line |
| Increase revenue opportunities for faculty and students. | I | Formulating the team for the Vidya Talent Centre (VTC) Engaging them in consultancy works | 2018-19 2020-21 |
| | п | Enhancing VTC activities Strengthening PMKVY activities MOU with Industries Analyzing the mode for getting funds from state/central govt.agencies. | 2018-19 2018-19 2019-20 2020-23 |
| | Ш | Enhancing the EDC activities Applying for funds through EDII | 2018-20 2020-21 |

VAST TC's Strategic Goal III: Promote and sustain a disciplined campus environment that supports a high quality of life and learning that positively impacts retention through graduation and produces knowledgeable and culturally competent citizens able to lead effectively and compete globally.

| Sub Goal 1 | Strategy | Action plans | Time line |
|--|----------|--|--------------------|
| Upgrade teaching- learning process to create impact. | I | Preparing course material | Regular basis |
| | II | Conducting Faculty training program | Regular basis |
| | Ш | Smart Class Rooms (2 per Dept.) All Class rooms – Smart Classes | 2019-20 2022-23 |
| | IV | NBA/NAAC accreditation – Preliminary work Applying for accreditation | 2018-20 2020-21 |

| Sub Goal 2 | Strategy | Action plans | Time line |
|--------------------------------------|----------|---|--|
| Increase student | I | Students Counseling system | Regular basis |
| retention to impact successful | II | Enhancing the PTA activities – impacting students | Regular basis |
| completion of graduation within | Ш | Continuing scholarships for need-based students | Regular basis |
| the prescribed period of four years. | IV | Identifying the potential year back students – plan appropriate programs - reducing the number of year back students | Regular basis |
| Sub Goal 3 | Strategy | Action plans | Time line |
| | I | Faculty-student ration – to meet NBA requirement | 2020-22 |
| | II | Mentoring program for new and untenured faculty | Regular basis Start of the academic year |
| Improve the | Ш | Hiring additional faculty in needed areas | As per requirement |
| teaching/learning environment | IV | Conducting programs – Ethics and code of conducts | Regular basis |
| | V | Providing Financial support - students, faculty, and staff – research papers in indexed journals | 2019-23 |
| | VI | Training centre for competitive exams – GATE / Engineering & Civil services | 2020-21 |
| Sub Goal 4 | Strategy | Action plans | Time line |
| | I | Conducting the cultural programs - regional and national festivals | 2018-23 |
| Improve the quality of campus life | II | Strengthening college clubs and professional societies | 2018-21 |
| | Ш | Improving and augmenting hostel, sports and recreation facility | 2018-20 |
| | IV | Campus ambiance through proper illumination, beautification and maintaining greenery | 2018-21 |

VAST TC's Strategic Goal IV: Continuous and involved participation of faculty members and students in various technical seminars, workshops and conferences. Motivate our faculty members and students to involve in research projects and to publish journal papers.

| Sub Goal 1 | Strategy | Action plans | Time line |
|--|----------|--|---------------|
| faculty & staff members and students to take part in | I | Conduction of technical seminars, workshops and conferences in campus | Regular basis |
| | Ш | Identifying potential areas and related training workshops and seminars in other institutions/universities | 2018-23 |
| Sub Goal 2 | Strategy | Action plans | Time line |
| Encourage the faculty & staff members and | I | Formation of research team and preparation of proposals for the required research setup and equipments. | 2018-19 |
| students to involve in research related projects. | П | Motivating faculty members and students to publish their research outcome in reputed journals | 2019-23 |

VAST TC's Strategic Goal V: Improve academic interaction and participation of institutes / universities of national and international eminence in order to facilitate learning, innovation and research.

| Sub Goal 1 | Strategy | Action plans | Time line |
|--|----------|---|-----------|
| Enhance MOU with premier Indian Technological Institutes and foreign universities. | I & II | Developing an interactive cell in the Institution to interact with leading institutes and signing MoU with them | 2019-20 |

| Sub Goal 2 | Strategy | Action plans | Time line |
|--|----------|--|-----------------|
| Establishing a hub of Institutional academic | I | Creating a database of institutional academic expertise | 2019-20 |
| expertise-VAST TC out reach. | II | Canvassing the academic exchange programs offer possible | 2020-23 |
| Sub Goal 3 | Strategy | Action plans | Time line |
| Creating an Engineering consultancy centre, | I | Establishing a team of skilled engineers and technical staff Setting up the required infrastructure and equipments. | 2018-19 2019-20 |
| catering the technical | П | Bringing creativity in the nature of services. | 2019-20 |
| consultancy need of other Institutes. | III | Marketing the services that can be rendered | 2020-23 |