SRI SIDDHARTHA ACADEMY OF HIGHER EDUCATION



(DEEMED TO BE UNIVERSITY)

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SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY

(A constituent college of Sri Siddhartha Academy of Higher Education, Tumakuru) Maralur, TUMAKURU-572105

STRATEGIC PLAN

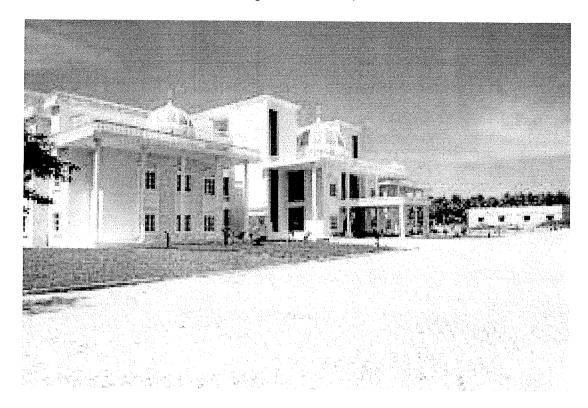
2022-2027 (5 year plan)



"The very spring and root of honesty and virtue lie in good education" -Plutarch

SRI SIDDARTHA EDUCATION SOCIETY

(Sri Siddhartha Academy of Higher Education) Siddharthanagara, B H Road, Tumakuru





'ShikshanaBheeshma' Dr. H.M. GANGADHARAIAH Founder Secretary, SSES, Tumkur

The strategic plan of Sri Siddhartha Institute of Technology (SSIT) for 5 years 2022-27 builds on recognizing the Vision, Mission and core values of the institute. Goals and strategies were developed to achieve significant progress towards the institute's aspiration of becoming one of the nation's leading technical institute in teaching research and development. The strategic plan emphasizes the institution's role as a premier institution that provides quality technical education and carrier guidance to broad array of students. The plan explicitly recognizes the need for changes in teaching learning process, research and development, skill development programs and entrepreneurship that are necessary for the growth of institution.

The Institutional Strategic plan is effectively deployed.

Strategic planning division has been functioning in the institute with different committees taking care of various academic and other related co-curricular and extra-curricular activities. The Institution has clearly stated vision and mission which are reflected in its academic and administrative governance

Effective leadership is reflected in various Institutional practices such as decentralization and participative management etc.

The college grooms the leadership through various forums and committees such as Academic Development Committee, Staff Development, Library, Students Welfare, Hostel, Magazine, Cultural, Sports, Malpractice, Placement, Purchase, Finance, Canteen, Anti-ragging, Anti Sex harassment, Grievance, Co-operative Society, Department Associations, ISTE/IEEE/IE (I)/CSI student Chapter, NCC/NSS activities, etc.

The institution is providing a quality education to the students by recruiting quality faculty and providing necessary infrastructure. The dedicated faculty make effective teaching and learning for the student to think, analyse and creative. The fundamental knowledge in science and technology will be imparted to the students through class rooms teaching and arranging workshops. Students are guided to organise technical events, conferences in their respective fields of expertise thereby instil managerial and soft skills. Institution encourages students to take part in NSS activities as well as NCC activities so that they can meet the societal needs. Students get placed in reputed companies by virtue of technical competence and knowledge they acquire during the course of their study.

Impact analysis of the various initiatives carried out and used for quality improvement

The IQAC has significantly contributed towards improving Students' academic performance, Teaching- Learning Process, Learning Outcomes, Assessment process, Research environment, Stakeholder Feedback Mechanism, administrative reforms and financial management in the institution.

Principal, Heads and academic coordinators of the departments take continuous review of teaching learning process in the Institute. Before commencement of each semester, an academic calendar is prepared. Faculty prepares lecture plan for the entire semester and all the coordinators ensure that the activities are conducted as per schedule. Heads and academic coordinators monitor class wise, faculty wise and subject wise conduction of theory and practical classes. Each faculty acts as a mentor for a set of students and periodically meets with students to review the teaching and learning process.

The Institution follows its own methodology and criteria for the assessment of student learning levels and conducts remedial lectures and make-up lectures and/or special practical sessions for the needy. The Institution collects and analyses students' feedback and takes corrective measures to improve the teaching-learning process. The courses undergone by the students in the entire program are categorized into theory, practical or integrated courses spread out over eight semesters. Both professional and open electives are offered as per the standard norms. Curriculum changes are effected as often as deemed necessary based on industrial expectations. Encouragement is given to students who wish to register for online courses offered by NPTEL, MOOC, SWAYAM, etc.

The concept of outcome based education has been brought in all departments with the active participation of Department Advisory Committee (DAC). The faculty and students are given awareness on the importance of Program Educational Objectives (PEO), Program Outcomes (PO) and Program Specific Outcomes (PSO) and Course Outcomes (CO). The teaching learning process is made learner centric by adopting outcome based education (OBE) processes and evaluation methods. All the courses in each program are defined with a set of course objectives and outcomes.

The examination system is heading towards outcome based evaluation. The questions in the question paper are set to fulfill the objectives of outcome based education. The assessment tools used to assess the course outcomes are categorized into direct methods and indirect

The Institution encourages the faculty members to enhance their teaching, research and development skills on par with the latest technological changes and industry needs. It also encourages the faculty and students to publish their research papers in reputed International Journals, attend national/international conferences and the faculty to carry out consultancy work. The faculty members are encouraged by providing the financial support to those who publish and present good quality research articles. They are also sponsored to attend national/international conferences.

The institution has a well formulated financial policy which ensures effective and optimal utilization of finances for academic, administrative and development purposes which help ultimately in realizing the institute's vision and mission. Budget is prepared by each department on the requirement such as equipment, computers as well as consumables required for the next academic session. The management reviews and approves the budget after necessary changes. The management periodically reviews the utilization of the budget and corrective measures are taken, if required.

The institute operates through an integrated framework that assures quality in academic and administrative activities. IQAC meetings are regularly held to review academic and administrative matters there by ensuring sustenance and enhancement of the quality of education as stipulated by various relevant bodies of accreditation. IQAC monitors effectiveness of teaching-learning process, OBE implementation, research and development activities, assessment and evaluation practices, financial management through periodic reviews. This has resulted in effective implementation of Quality assurance procedures, meeting of targets planned as stated in the quality objectives of every department, resulting in enhanced academic performance and continuous, sustained growth of the institute.

The Institute has implemented e-governance in the following areas of operation

- 1. Planning and Development
- 2. Administration (including Hospital Administration & Medical Records)
- 4. Student Admission and Support
- 5. Examination

The institution provides information to the faculty, students and parents through online as and when required. The students are encouraged and motivated by the institution in contributing to

methods. The direct assessment is through internal assessment in the form of tests, assignments and quiz and through Semester End Examination. Students are provided with an opportunity to see their answer scripts (of each course) after completion of evaluation of internal tests and midterm exams. This is aimed to bring more transparency and also reduce the number of re-totaling/re-valuation cases. Indirect method includes Course End Survey from the students to know their opinions or thoughts about the learning outcome of the courses. The evaluation of attainment of POs and PSOs is based on the mappings from COs to POs and PSOs. The POs, PSOs attainment level comprises of 80% of the direct assessment and 20% of indirect assessment. The IQAC and DAC help in evaluating the achievement of POs, PSOs and PEOs. Attainment analysis is used for continuous improvement through course delivery, assessment methods and modification of curriculum.

As a part of ensuring quality in maintenance of academic and personal records by each and every faculty of college with respect to courses taught by them, an internal audit was conducted by using the services of senior level faculty of the college. This helped the heads of the department to a larger extent to maintain all the relevant records as expected by the visiting expert committees and in line with the set up standards. It also helped the college administration to ensure smooth operation and running of the academic processes and activities across all the departments of the college.

Subsequently the external audit has been conducted with respect to the central facilities like Central library, Guest house, Hostels (boys and girls), Cafeteria, Canteen, society, sports, etc.. Separate committee was setup to visit every department in this connection. The report has been submitted by all the concern in respect to audit carried out. A consolidated summary of the audit is prepared and circulated to all the departments for corrective measures.IQAC also monitors the stakeholders' feedback mechanism on curriculum and teaching-learning adopted.

In order to inculcate quality in Teaching-Learning and Research & Development, IQAC has organized several workshops on quality aspects such as Quality Assurance, Professional Ethics, Social Concern in Engineering Domain, Pedagogical skills, Induction training programs, etc. The cell also organized a series of extramural lectures on recent technology trends, challenges and career opportunities for the benefit of students and faculty.

national development through NSS programs and NCC Camps. The Institution also motivates the faculty and students to attend seminars, workshop, paper presentation and symposium in other colleges. The institution inculcates societal values among students through blood donation camps, environmental awareness programs, creating awareness in public on social issues through various clubs andby promoting the use of technology as required.

The institution motivates students to undergo internships in reputed companies and motivates faculty quest for excellence for their research activities through rewards. The Central library has Wi-Fi connectivity, e-journals with digital library platform as well as provision for referring to latest collection of journals. In addition the libraries at various departments cater to the requirements of the students in respect of rarely available text/reference material. The academic progress of the students is continuously monitored through internal evaluation test/quiz/seminar/surprise tests/ assignments. The students are motivated by the counsellors (1:20) and based on their performance they are trained and advised to participate in workshops, seminars and paper presentations to improve accordingly. The strategic plan for annual budget, human resource development, academic excellence, brand building, student placement opportunities, etc. is take care of by the college administration through proper approval sought from the Governing Council.

Human resource planning and development is effective in the institution following the process of recruitment of faculty and staff, based on the assessment made by the concerned, from time to time, with faculty training imparted periodically. Faculty are supported to undergo R&D activities, consultancy, interaction with outside world, etc. Currently there are 73 faculties with Ph.D. and 95 members pursuing their Ph.D. in various disciplines. Professional development of faculty is ensured through financial support and required leaves as per Institute norms. Internationalisation is realised by inviting subject experts/ alumni working abroad for invited talks and face-to-face meeting with the students so that they are exposed to global market demands.

The Institution has effective welfare measures for teaching and non-teaching staff and other beneficiaries.

The institution provides facilities to all the teaching and non-teaching staff members such as transport, GSLI Scheme, maternity and paternity leave, contribution for employee's provident fund as well as career advance schemes. The Performance Appraisal System adopted for

teaching and non-teaching staff, includes self-appraisal which is taken once in a year, feedback from the students twice in every semester through Gurukul. The appraisal form will be containing questions with multiple options to assess the rating.

The strategic plan identifies four key themes; its two central foci include offering an outcome based education to undergraduate and postgraduate students and accelerating the research and development. Departments will develop their own strategic plans or objectives that align with this plan. SSIT is committed to provide students with a quality technical education with a focus on enhancing the quality and relevance of the learning experience, providing personalized student services, expanding learning opportunities outside the classroom, and developing a more cohesive student community.

Changes in the student experience will include increases in the quality admission intake of undergraduate. Continued pursuit of a quality research will occur as a result of strategic investment in research infrastructure and increased faculty research effort. In addition, SSIT will establish research centers of excellence in emerging areas, interdisciplinary collaboration and industry institute programs. It is aiming to become an International University by 2025 by achieving the goals identified under four differentthemes.

Theme 1:

Quality of Teaching Learning process with Outcome Based Education

Goal 1: To provide an excellent teaching and learning opportunity with modern teaching aids and facilities.

Goal2: To improve curricular and student support infrastructure to enhance access to quality education.

Goal3: To provide facilities and support system to co-curricular and extracurricular activities for all-round development and success, which prepares graduates to lead and excel in a diverse global society.

Theme 2:

Quality Research, Innovation, and Creativity programs

Goal 1: To increase productivity in quality research publications, research, innovation,

and creativity to address the challenges and opportunities for the future.

Goal 2: To develop collaborative research in multidisciplinary areas by providing greater emphasis for industry institution programs

Goal 3: To improve the quantity of funded research projects from national and international fundingagencies

Theme 3: Outreach and Engagement

Goal 1: To Increase access of academic, research, and extension programs through certificate programs.

Goal 2: To Expand and enhance engagement with institutions, communities, governments, and the private sector.

Goal 3: To Increase faculty, staff, and students' contributions to improve quality of life and sustainable development of the community.

Theme 4:

Efficient and Effective Management

Goal 1: To establish Centers of Excellence for Research and Development to coordinate research programs across the departments and to facilitate multidisciplinary research.

Goal 2: To establish effective entrepreneur cell and training department to start certificate programs for working professionals.

Goal 3: To increase efficiency of the system by enhanced automation and adopting "best practice" methodologies, supported by an integrated ICT structure. This will provide real-time access to information for students, staff and management for decision-making purposes.

Implementation and Monitoring Plan

To effectively implement the focus areas identified in the strategic plan, the establishment of an implementation committee is envisioned to ensure that initiatives are developed and executed to realize the plan's goals. The benchmarks identified for each goal, located in the table below will be calculated on an annual basis. The implementation committee will define quantitative targets annually rates of progress (milestones) for these benchmarks. The implementation committee will collect information from various academic and support units to identify targeted initiatives to advance the institution in achieving the specific goals in the plan. With the assistance of the all the departments, annual report will be prepared for each calendar. Implementation committee will identify and report annually on their progress toward metrics consistent with, and whose attainment will contribute to, the institution-

levelplan.

Theme 1: Quality of Teaching Learning process with Outcome Based Education

Goals	Potential Initiatives	Quantitative Metrics
To Provide an excellent teaching and learning opportunity with modern teaching aids and facilities.	Outcome basedEducation • Regular Pedagogy training	 No. ofdepartments accredited byNBA No. of faculty undergone pedagogytraining No. of courses having self- learning /project based learning components No. of classrooms with supportfor digital technology.
To Improve curricular and student support infrastructure to enhance access to quality education.	 Outcome based curriculum with more emphasis to projectwork Digital library with access to NPTEL and open source systems Accesstomanyreputedpeer reviewedjournals 	 No. of courseswith miniprojects No. of online learning resources inlibrary No. of peer reviewed journal subscriptions
To Provide facilities and support system co-curricular and extracurricular activities for all-round development and success, which prepares graduates to lead and excel in a diverse global society	 Separate department for Extracurricularactivities Modern sports facilities for Basketball, gym and indoor sports Placement and Training Department provided with ICT tools and modern infrastructure Entrepreneurship development Cell is establishedtotrainstudents tostarttheirowncompanies 	 Availability of sections/ departments for placement and training sports, extracurricular activities and entrepreneurship development. No. of students served by theabove said departments.

Theme 2: Quality Research, Innovation, and Creativity programs.

Goals	Potential Initiatives	Quantitative Metrics

ToIncrease productivity in Quality research publications, research, innovation, and creativity to address the challenges and opportunities for the future	 Many of Departments are recognized research centers to pursue PhD and M.Sc Engg. Degree. Measures are taken to improve the existing PhD faculty strength from 40% to 80% by2025. Encouraged to apply for funding from various funding agencies and internal funding initiatives areunder taken. 	recognized as
Todevelop collaborative research in multidisciplinary areas by providing greater emphasis for industry institution programs.	 Applied for Centers of excellence by various Industries in thecampus. MemorandumofUnderstan ding is signed with boeing to establish research center in the campus. 	> No. of MoU's signed with industries.
To improve the quantity of funded research projects form national and international funding agencies	 At present projects are in progress, funded by various state and national funding agencies. Interdisciplinary projects are applied for funding. Internal funding initiatives aretakenunder. 	➤ No. of projects fundedprojects.

Theme 3: Outreach and Engagement

Goals	Potential Initiatives	Quantitative Metrics
To Increase access of academic, research, and extension programs through certificate programs.	• Two certificate programs in collaboration with industries are initiated and Planning to start in allthe departments	• No. of certificate programs offered.
To Expand and enhanceengagement with institutions, communities, governments, and the private sector.	 Around 15 Memorandum of Understandings are signed for collaboration with industries andInstitutesinlasttwoyears for research and consultancy. 	• No. of MoU's signed.

То faculty, Measuresaretakentoimprove Increase • No. of peer staff, peerreviewedpublication and students' reviewed A rural Development program contributions to improve publications. of life quality such as Swatch Bharata • No. of sustainable development Abhiyana, computer Community of the community awareness programme was outreach initiated by NSS. activities. NSS group at SSITconducts blooddonation programs.

Theme 4: Efficient and Effective Management

Goals	Potential Initiatives	Quantitative Metrics
To establish centers of Excellence for Research and Development to coordinate research programs across the departments and to facilitate multidisciplinary research.	 Research center will guide the faculty to get funding from various national and Stateagencies. 	Availability of research center and its utilization by faculty and students.
To establish effective entrepreneur cell and training department to train graduates and to startcertificate programs for working professionals.	 Entrepreneurship cell has been established to train graduates in entrepreneurial activities. InstituteAlumni entrepreneurs are involved in conducting programs. Certificate programs in collaboration withindustries are initiated for working professionals. 	incubated in the
To Increase efficiency of the system by enhanced automation and adopting "best practice" methodologies, supported by an integrated ICT structure, will provide real-time access to information for students, staff and management decision-makingpurposes.	 Initiatives are taken to prepare soft copy of the course materials and Video Lectures for major core courses. NPTEL, VTU –Edusat Lecture notes are available in thelibrary. Complete Automation for Student Admission and Academic processes. Outcome based education process is effectively implemented using Automationprocess. 	No. of in-house courses available online No of online Resources made available to students. Availability of campus automation system and its effectiveness

Future Plans of action

- 1. The syllabus will be subjected for thorough changes to suit to the changing-scenario in industries and R&D sectors.
- 2. Efforts will be made to fine tune the syllabi in line with the National Education Policy.
- 3. The objective is mainly towards realising the students graduating from the University to be completely industry ready, confident and adoptable enough to face the world.
- 4. Teaching-Learning process will have to be completely revamped with smart Class rooms, online/blended learning, etc.
- 5. Better open electives and value added courses are introduced for the benefit of students across many disciplines.
- 6. Full syllabus coverage is ensured both in teaching and in examinations.
- 7. Efforts are initiated to ensure continuous quality based evaluation of the performance of students at all levels.
- 8. In some specially designed courses, introducing open-book examinations will be Thought of.
- 9. Re exams such as make-up examinations, summer term exams will be conducted, without compromising quality.
- 10. Double valuation, coded valuation and digital valuation is made for all scripts.
- 11. Third valuation, where ever needed, will be carried out by taking the service of externally invited expert evaluators.

12. Grievances, if any, will be addressed through central Grievance Redressal Cell.

Chief Coordinator

Chief Coordinator

ICAC-SOTT. TUMAKUNU

Chairman & Principal

Chairman & Principal IOAC-SSIT. TUNAKURU