

SENGUNTHAR ENGINEERING COLLEGE

(AUTONOMOUS)
(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai) Recognized Under Section 2(f) & 12(B) of the UGC Act, 1956 NAAC Accredited with 'A' Grade

TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU



Strategic Plan and Deployment Document

(2020-2025)



Estd. 2001



SENGUNTHAR ENGINEERING COLLEGE (AUTONOMOUS) TIRUCHENGODE - 637 205

Vision

To be a prominent centre for academia transforming the life of aspiring minds by imparting professional, technical, ethical, entrepreneurial skills and research attitude to address global challenges.

Mission

- To train the students to develop into competitive professionals and entrepreneurs with high ethical standards.
- To offer a contemporary and flexible curriculum, industry collaborative teaching, and learning process to achieve academic excellence in Engineering and Technology.
- To establish research centers of excellence in niche areas to foster research for addressing local and global challenges.
- To engage the students in extension activities and outreach programmes for social development.



Executive Summary

Sengunthar Engineering College is the premier institution which is providing better education in Namakkal district of Tamilnadu since two decades. The institution is offering professional Programs in Engineering, MBA and Ph.D.

The institution was established by the Sengunthar Charitable Trust. Sengunthar Charitable Trust established in 1995, is dedicated to bring out the hidden potential in students and shaping them to high order entrepreneur.

Sengunthar Engineering College was established in the year 2001 with a vision and mission to create a platform for holistic growth and success to students at all levels.



Ouality Policy of the Institution

Quality Policy:

- Provide Quality Technical Education in Undergraduate and Post Graduate fields as per the University Syllabus and in strict compliance with AICTE requirements.
- The Quality Education encompasses the needs and expectations of all interested parties with a strong focus on student centric approach.
- The main focus would be to build students of character and make them employable and successful in their life by inculcating life skills.
- We will strive to consistently achieve these through building competencies among faculties and continual improvement of the QMS.

Milestones achieved by the Institution:

- · Accredited by NAAC with 'A' Grade in the year 2015
- Permanently affiliated to Anna University (MECH, EEE, ECE and CSE)
- Recognized under section 2(f) & 12(B) of UGC in 2015
- AICTE approved MSME Host Institution in the year 2018
- Sengunthar business incubation center is sponsored by DST in the year 2014
- Conferred Autonomous status by UGC in the year 2019
- PMKVY Skill Development Center by AICTE
- Scientific and Industrial Research Organization (SIRO) Recognized by DSIR, Government of India



SWOC Analysis of the Institution

Institutional Strength:

- The Institution has Qualified and Experienced faculty
- Good Teaching and Learning process
- The Institution periodically conducts Conferences, Workshops, and Faculty development programs
- Well designed employability skills assessment and Training programs by in house training division "Technical Hub"
- Social extension activities like blood donation camps, educating rural society and conducting health camps
- University affiliation with 10 years of educational legacy along with NAAC "A" grade accreditation.
- Supportive management, committed faculty & staff with creative and innovative ideas, motivated students.
- Sengunthar Charitable Trust Scholarship for all eligible students.
- Implementation of Outcome based Educational process.
- Strong focus on Excellence in Education, Research and Promotion of Innovation & Entrepreneurship.
- Periodic Project Review meetings to encourage the students to work on real-life solutions/applications.
- Excellent Industry-Institution Interaction which in turn very much useful for upgrading the curriculum and syllabus based on current industry needs.
- Value added courses; Life Skills and Employability Enhancement courses are included as a part
 of the curriculum for improving the Employability, Entrepreneurship, and Skill development
 activities.
- Conversion of Bio-Degradable waste into Bio-Fertilizers by Vermi composting.
- Effective function of Rain Water Harvesting.
- Celebration of National and International Commemorative Days.

Institutional weakness:

- Collaborative laboratories with industry to enhance industry Institution interaction.
- Implementing the Innovative Teaching Strategies and Outcome based education as per bloom's Taxonomy.
- Strengthening Alumni Association and their Contribution to the institution through Entrepreneurship and Skill development activities.
- ICT tools for implementation of innovative teaching learning methodology.
- Students' awareness on GATE and other competitive examinations.

Implementation of renewable energy generation and waste water treatment facility.

Institutional opportunity:

- Considering the socio economic background of the students there is a scope to focus on pedagogy for seamless transfer of knowledge from the faculty to the students.
- Entrepreneurship Cell to incubate and encourage students with innovative ideas to develop the entrepreneurship skills among the students.
- Motivating students to upgrade their knowledge through MOOC courses like NPTEL or SWAYAM which facilitates lifelong learning.
- Upgrade the laboratories with sophisticated equipment and software tools to train students, support research and consultancy.
- Learning flexibility through extracurricular activities like sports, NCC and NSS.
- Enhancing Energy Conversation by new policies and mythologies
- More facility for Disabled person
- Better policy and innovative methods for Waste Management
- Advancement in emerging technologies like Artificial Intelligence, IOT, Robotics and 3D printing provides scope for more employment
- Provincial industrialization and government initiatives like Make in India, Startup India provides scope for entrepreneurship

Institutional challenge:

- Limited resource funding from national and International funding agencies to pursue cutting edge research and consultancy.
- Enhancing the communication and employability skills of the students has become a major challenge in the present-day industry demand.
- Measures to review the course content in order to make them relevant to the present-day industry requirements.
- Innovations in curriculum and teaching pedagogy to place students at par with global competitions.
- Lack of interest among the students to pursue research as career.



Strategic Plan of the Institution

Strategic Plan 2020–2025 identifies the following broad targets:

- To emerge as a Premier institution, among peers, to offer various programs on cutting edge technologies
- Strengthen Research and Development activities and emerge as a creator of new and innovative projects that cater to the needs of society
- Product development centre to be established
- Launch trending courses to meet out the societal needs
- Intensify Alumni involvement in all aspects of Institution development
- Provide an amicable work culture in the Institution for retention of staff members
- Applying for grants from government and private sources
- Skill development centre to be established
- Create sources for internal revenue generation
- Get NBA accreditation for eligible Programmes
- To receive recognition through accreditations (NAAC "A++" Grade) and sustain in the top 100 NIRF Ranking
- To achieve "Deemed to be University" status within the year 2033
- Extension of available area to accommodate more classrooms, laboratories, and renovate infrastructure of the institution
- Achievement of recognition from national and international organizations in the form of grants and awards.
- Partnering with Research Institutions
- Mobilization of funds and projects through the alumni and other stake holders
- Imparting in-depth knowledge by providing proper training in advanced technologies
- Develop online courses
- To Increase the number of Faculty members with Ph.D qualification
- Renovation of physical and IT Infrastructure and upgrade Contemporary Labs, Research Lab, Examination Management Information System E-MIS), ICT tools
- Secure Consultancy projects of 5 Lakhs in the next 5 years
- Two research publications per faculty per year, and at least 50% of the said publications be indexed in SCOPUS, WOS
- Exposing the students to enhance their skills for industrial environments
- Commitment for personality development of students though training on ethical values.



Deployement of Strategic Plan of the Institution

Strategic Plan 2020–2025 identifies the following implementation:

Strategic Plan	Deployment	Remarks
To emerge as a Premier institution, among peers, to offer various programs on cutting edge technologies	Offering Trending courses such as AI&DS, Cyber Security.	-
Strengthen Research and Development activities and emerge as a creator of new and innovative projects that cater to the needs of society	New Course Ph.D. has been established under Faculty Electrical and Electronics Engineering (2022- 2023)	.5
Product Development Centre	"Eagle Factory" - Skill Training Centre established— (2023-2024)	-
Skill Development Centre	-	Plan to establish Kriakshetra "Skill Development Centre (2024- 2025)
Launch trending courses to meet out the societal needs	Artificial Intelligence and Data Science Course has been established in the year 2021-2022 Cyber Security Course started in the year 2022-2023 Pharmaceutical Technology started in the year 2023-2024	Plan to apply for new course "Artificial Intelligence and Machine Learning"
Intensify Alumni involvement in all aspects of Institution development	Contributed Fund for Open Air Auditorium.(2022-2023) Sponsored Water Doctor at Office and Hostel (2022-2023) Sponsored fund for purchasing public addressing system (2022-2023)	-
Provide an amicable work culture in the Institution for retention of staff members	More than 50% faculty retention is maintained due to friendly work environment.	-
Applying for grants from government and private sources	MSME Host Institution Received Grant from AICTE under MODROB scheme. (2021-2022) Sanctioned grant from AICTE under RPS scheme. (2021- 2021)	-
Create sources for internal revenue generation	Consultancy Activities Sengunthar Eagle Factory	NID A
Get NBA accreditation for eligible Programmes	-	NBA Accreditation work is in progress for all the Programmes.

To receive recognition through accreditations (NAAC "A++" Grade) and sustain in the top 100 NIRF Ranking	-	Quality Improvement is maintained to get NAAC A++ in next cycle.
To achieve "Deemed to be University" status within 10 Year duration.	-	-
Extension of available area to accommodate more classrooms, laboratories, and Renovate infrastructure of the institution.	The institution has adequate infrastructure and physical facilities for teaching-learning.viz., classrooms, laboratories and computing equipments	_
Achievement of recognition from national and international organizations in the form of grants and awards.	-	-
Partnering with Research Institutions.	Made MoU with MATLAB for Research and Development on 11.01.2023 for five years	-
Imparting in-depth knowledge by providing proper training in advanced technologies.	MOU has been made with Alpha Tech Academy Solutions, Bangalore, FACE Prep Coimbatore, Indian Biomedical Skill Council, Visakhapatnam, Edu Skills Foundation	-
To Increase the number of Faculty members with Ph.D qualification.	10 Faculty members Pursing Ph.D. (2022-2023) 15 Faculty members registered Ph.D. (2023-2024)	20
Renovation of physical and IT Infrastructure and upgrade Contemporary Labs, Research Lab, Examination Management Information System, ICT tools,	MATLAB- Proprietary software purchased in the year 2021-2022 with Campus wide License. Computer Centre at Placement Block renovated with 110 new systems. 2 Nos. of Smart Touch Panel Class rooms are established in the year 2023-2024 College Website up gradation done in the year 2023-2024	-
Secure Consultancy projects of 5 Lakhs in the next 5 years.	-	-
Two research publications per faculty per year, and at least 50% of the said publications be indexed in SCOPUS, WOS.	Faculty members published their research articles in reputed journal every year	- 8
Exposing the students to enhance their skills for industrial environments.	Add on programmes offered to the students based on the Industry requirements.	-
Commitment for personality development of students though training on ethical values.	MoU has made with Alpha Tech Solutions Pvt Ltd Bangalore Provide Soft skill and Communication Skill training given to the students.	-